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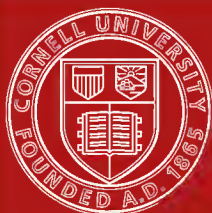
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# THE HARVARD-NEWTON BULLETINS

NUMBER II

## SCALES FOR THE MEASUREMENT OF ENGLISH COMPOSITIONS

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## INTRODUCTION

WHEN educational research in a city school system is carried on jointly by a department of education in a university and the school authorities of that city, it combines two purposes. The department of education engages in it to promote the scientific study of educational problems and to assist in their solution. Its purpose is larger than that of the school system in which the work is done. The city school system engages in such work chiefly to improve educational conditions and practices in that city. Such educational research as is undertaken, therefore, should be of mutual advantage and should combine both purposes.

The method of carrying on such research should be coöperative. There should be combined and applied to the solution of such educational problems as are studied, the practical knowledge which teachers, principals and other school workers possess, and the educational insight and exact methods of investigation which the department of education has at its command. To be of the greatest value to the school system such work should be participated in by as large a number of teachers and school officers as can advantageously be used: and the work should never be allowed to become a burden to them. On the other hand, the work should be in charge of a responsible head connected with the department of education who should apply the available resources of the department to the study of problems in the school system. Properly qualified graduate students can participate with advantage and profit to the school system and to themselves.

In the prosecution of their research, much purely clerical work is inevitable. This should not be done by the teachers or those in the department of education, but by competent clerks.

This study was started and has been carried on in accordance with the foregoing principles. The study has been directed by

the Joseph Lee Fellow for Research in Education: it has been participated in by principals and teachers in Newton, and by properly qualified graduate students in the Division of Education, Harvard University. At all times, the work has had the careful supervision of members of the Division of Education, and of Superintendent F. E. Spaulding of Newton.

At the close of a piece of coöperative research, the director always finds himself under many obligations. To those who have participated in this undertaking, and to those who have supervised the carrying on of the work, the writer acknowledges his indebtedness, and wishes to express his sincere appreciation of their hearty and effective assistance.

FRANK W. BALLOU.



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## NUMBER II

### SCALES FOR THE MEASUREMENT OF ENGLISH COMPOSITIONS

#### PURPOSE AND METHODS OF THIS STUDY

#### WHAT THIS MONOGRAPH IS

AN experiment with the Hillegas Scale <sup>1</sup> showed that the use of such an objective measure did unify the grades given to compositions by teachers. It was also found, however, that the Hillegas Scale was not satisfactory to the teachers of Newton, owing to what seemed to them to be inherent faults. These faults may be stated briefly as follows: (1) the scale aims to measure too varied a product; (2) the compositions in it are not typical of good school work; (a) some are artificial, (b) others are "bookish," really reproductions,<sup>2</sup> and (c) no conversation is contained in any of them. Hence it was proposed to prepare another scale, or rather a series of scales, in such a way as to obviate these apparent defects. The following monograph is a report on the preparation of such a series of scales. These scales were prepared through the coöperation of the Joseph Lee Fellow for Research in Education, the eighth grade teachers and the elementary school principals in the public schools of Newton, assisted by the teachers of English

<sup>1</sup> A Scale for the Measurement of Quality in English Composition by Young People — M. B. Hillegas. In *Teachers College Record*, September, 1912.

<sup>2</sup> As an experiment we prepared a scale for measuring compositions in reproduction written by eighth grade pupils. After careful consideration of the matter at a teachers' meeting, it was agreed that such a scale ought not to be published. The reasons briefly stated are as follows: 1. At best Reproduction is the least desirable form of composition. 2. Reproduction as a form of theme writing is too often characterized by a slavish repetition of words or of ideas. 3. The publication of a standard scale is likely to emphasize this undesirable practice.

in the high schools of Newton, and by teachers and principals in Arlington, Massachusetts, and Boston. The teachers and principals in Newton secured from their pupils the compositions used in the experiment, and they graded and ranked each set of compositions. It was on the basis of their composite judgment that the compositions were selected for each scale. The teachers of English in the high schools of Newton assisted in defining the merits and defects of the compositions in the scales. The eighth grade teachers and elementary school principals in Arlington, and a committee of similar teachers and principals in Boston assisted in the experiment by testing the use of the description scale after it had been finally prepared. Although the scales were prepared primarily for use in the eighth grade in the Newton Schools, they are published in order that whatever worth they possess may be shared with teachers elsewhere.

#### THE PURPOSE OF THE STUDY

The need of scales and similar standards as objective means of measurement in education, is speedily gaining recognition as the present insistent demand for educational efficiency increases. The successful measurement of educational efficiency depends on the establishment of standards of measurement in all departments of school work. The need of standards by which to measure the class-room work of pupils has been shown by every investigator who has examined the present methods of rating or grading school work.<sup>1</sup> Every such investigation has shown startling variations in the grades given the same piece of work by different teachers. Inasmuch as the piece of work graded is a constant factor, the variation must be in the teachers who do the grading. The variation may be due to the lack of a uniform or common standard of judgment, or to the varying degrees of

<sup>1</sup> For example, see Starch and Elliott, "Reliability of the Grading of High School Work in English," *School Review*, Vol. 20, pp. 442-457. Also "Reliability of Grading Work in Mathematics," *ibid.*, Vol. 21, pp. 254-259. Also "Reliability of Grading Work in History," *ibid.*, Vol. 21, pp. 676-681. Also Jacoby, "Notes on the Marking System in the Astronomical Course in Columbia University, 1909-10," *Science*, Vol. 31, p. 819.

accuracy with which teachers apply a common standard. In view of the fact that the progress of the student throughout his whole educational career is contingent on his having earned acceptable grades from each successive teacher, it is clear that the importance of accurate measurements of his intellectual attainments cannot be over-emphasized.

It is to create an objective standard for the measurement of one of these intellectual attainments, namely, the writing of English, that the preparation of this series of scales is undertaken. By the wise use of such standards it is hoped that teachers may come to agree more uniformly in their judgments of the value of an English composition written by an eighth grade pupil. It may be reasonably doubted whether it will ever be possible for educators to measure the results of school training as accurately as laymen measure temperature with a thermometer, or a board with a square, or a piece of carpeting with a yard stick. Nevertheless, objective standards should serve as a basis for the exercise of the subjective judgment, and until objective standards of measurement are established in the realm of educational practice educational progress will be determined as heretofore, by mere opinion, and hence cannot be based on scientifically determined educational facts.

#### PRINCIPLES ON WHICH THE PREPARATION AND USE OF A SCALE SHOULD BE BASED

From the attempted but only partially successful use of the Hillegas Scale, it seemed that to be successfully used a scale for measuring compositions must be formed and applied according to the following general principles.

1. A scale should not aim to measure too complex a product. To attempt to measure the several forms or types of English composition by one and the same scale is like trying to measure heat, light and color by the same instrument. To measure successfully the common but different forms of English composition written by any given group of pupils we need as many different scales as there are different forms of compositions. This study

includes the preparation of scales for measuring description, exposition, argument, and narration.

2. A scale should be made up of compositions having the same characteristics as those which the scale is intended to measure. The qualities of a composition of a freshman in college are different from those of an eighth grade pupil although each student may have written on the same subject, and although further each composition may merit the same grade. Hence, each scale in this study is made up of compositions actually written by eighth grade pupils and is intended to be used in judging the quality of compositions of eighth grade pupils. It is possible and indeed probable, that these scales may prove almost equally serviceable in the seventh grade and in the first year high school.

3. A scale should conform, as far as practicable, to the present almost universal practice of rating school work either by the use of letters or of numerical grades. There seems to be little, if any, practical need of a scale for the eighth grade which shall measure any work which is much below 40%. Hence, each of the following scales contains six specimens or samples, of English composition graded A, B, C, D, E, and F, and representing in general<sup>1</sup> the grades, 95%, 85%, 75%, 65%, 55%, and 45%, respectively.

4. The readers on whose combined judgments the selections of the scale is based should be those persons most familiar with the qualities of the compositions to be measured by the scale. This is essential because the scale must find acceptance among those who use it. Accordingly, the scales here presented were selected on the basis of the combined judgments of eighth grade teachers and such others as supervise, and hence are familiar with, eighth grade work in English composition. A scale which has been ever so scientifically prepared, but which does not carry conviction of the possibility of its usefulness is worthless as a practical instrument in the hands of the teacher. The piling up of numerous

<sup>1</sup> "In general," because each composition in the scale is expected to form the standard for measuring all compositions which fall within the limits of that ten per cent of which the composition in the scale forms the center. For example, the "A" grade composition is to be the standard for measuring all compositions which vary in quality from 90% to 100%.

judgments, of the contents of which nothing is definitely known, does not appear to be a proper basis for selecting a scale.

5. The compositions of a scale must be analyzed as to merits and defects, else there is not only no guarantee, but little probability, that the users of the scale will interpret the qualities of those compositions any better than they now interpret the qualities of compositions without the use of any objective scale. Even though two individuals may have given a composition the same grade, say 80%, there is no certainty that they judged the composition on the same qualities. In fact, it is altogether probable that they did not grade it on the same elements or qualities, and the giving of the same grade to it does not, by any means, indicate uniformity of judgment. Hence, merit must be defined, or the scale remains to most would-be users merely a series of compositions like any others. This definition we have tried to make. The same teachers who marked the compositions have defined those qualities of merit and defect which prompted their ratings. The definition of the qualities of merit and defect have been attached to each composition in each scale. By this means each teacher who uses the scale will know what the readers considered the merits and defects of each composition. Without such a definition of qualities, there is no certainty that the user of the scale will see in each composition the same merits and defects that the reader saw. Unless the user does recognize the same merits and defects, there is little or no advantage in his comparing a set of compositions to be graded with those of the scale: he might as well compare them with one another.

6. Teachers must accept a scale as a standard, in the same sense that they accept other standards. If one judges that a piece of string is a foot long, and on measuring it with a tape measure finds it is only ten inches, he accepts the correction of his own subjective judgment as indicated by the standard tape measure. So it should be in measuring compositions. If a scale is to become a real standard, it must be accepted as such and used in the true sense of a standard. Each composition in the scales which have been prepared has been selected on the basis of the

combined judgment of a group of well-qualified readers. The assumption is that the combined judgment of a group is more reliable than the single judgment of any member of the group. When a composition is to be graded it is compared with the scale, and if it is about like the 75% composition of the scale, that should be the grade for the composition. Unless this is the case, the scale cannot be called a standard of measurement.

To summarize: we have prepared a series of four scales with which to measure respectively the four forms of composition-writing of eighth grade pupils, namely, description, exposition, argument, and narration. Each scale is made up of compositions having the same characteristics as those which the scale is intended to measure. The compositions in the scale were selected on the basis of grades given by teachers and other school people familiar with what eighth grade compositions ought to be. The compositions in the scale range approximately by regular degrees of quality from the very best which pupils of the eighth grade can write to one about as poor as ought to be found in eighth grade work. The compositions are defined as to merits and defects by the same teachers who rated them, and who are to use them. Although a scale made on this basis seems to promise much beyond what has been thus far attempted, nevertheless, its real worth will have to be determined in practical use in the school-room.

#### SECURING THE COMPOSITIONS FOR THE EXPERIMENT

##### *(a) Obtaining the Compositions from Pupils*

The compositions used in this study were written by eighth grade pupils in the schools of Newton, Massachusetts, as a part of their regular school work. Several topics in description, exposition, argument, and narration familiar to the pupils, were suggested by the teachers or proposed by the pupils, and each pupil chose his subject. Pupils were asked to write a composition "about a page in length, — not over two pages." They were allowed opportunity within school time, up to one hour, for self-preparation for the writing, and another hour for self-correc-

tion of their productions, in order that each composition written might be the best unaided writing of which each pupil was capable. By obtaining compositions written by pupils as regular school exercises compositions were secured which are characteristic of the work of eighth grade pupils in this school system.

In order to secure compositions representing the range of quality characteristic of the work of eighth grade pupils, and at the same time make as little unnecessary work as possible for the teachers and the pupils, a selection of compositions was made in the following manner. The eleven schools were grouped into five groups having approximately the same number of eighth grade pupils in each group. The first and fifth groups consisted of one school each, the second, third and fourth of three schools each. Each of these five groups secured from its pupils and furnished for this study, specimens of a given type of composition: for example, group one furnished narrations, group two, arguments, and so forth. Each school furnished samples to the number of 25% of its entire enrollment in the eighth grade. Each class teacher was asked to select that 25% of the compositions which represented progressively all degrees of ability, including the best and the poorest. After the compositions had thus been selected by each class teacher, they were numerically graded by the eighth grade teachers <sup>1</sup> in the school and the principal independently.

In order to increase the chances of getting compositions of sufficiently superior quality to merit the highest grade, namely "A" or 95 %, each of the eleven schools in which there were eighth grade pupils, sent in from one to three of its " best " compositions in all forms of writing as judged by the eighth grade teacher or by teachers and the principal.

This study has to do then with the " best " compositions written by pupils in the eighth grade in all the schools of Newton, as selected by the teachers and principals, and a selection of

<sup>1</sup> In two cases the eighth grade teacher taught seventh grade: in one case, where there was only one eighth grade teacher, the seventh grade teacher was included in this preliminary grading.

compositions made by the teachers from all the compositions written by all the eighth grade pupils, in a school or groups of schools, such selection including at least 25 % of all compositions and also made with a view of securing compositions representing all degrees of quality.

The number of "bests" sent in each of the series averaged one for each school, and the number of others ranged from twenty-two to twenty-six samples. Twenty-five samples in each series seemed a sufficient number to be read and graded by teachers as a basis for selecting a scale of six compositions representing the grades A, B, C, D, E, and F. From the teachers' selections of from thirty to forty compositions, it became necessary to select the twenty-five to make up the set to be read. The basis for this selection was the preliminary grades given each composition by the teachers and the principals, together with the judgment of the director of the experiment. The director's judgment was based on a careful reading of each composition, on a comparison of the ratings given the compositions by the different readers, and the general fitness of each composition for a place in the scale.

Some compositions were obviously unfit for use in a scale: for example, they were too long or too short: of course such were rejected. On the above mentioned basis those compositions were selected for final readings by teachers which would best serve the purpose of the study, and which were typical of the grades, A, B, etc., which were to be the basis of the scale. The twenty-five compositions which finally made up the set from which a scale was to be selected usually included about ten "bests" and fifteen others, or three samples each of the representative grades below 95 %.

#### *(b) Preparing Compositions for the Readers*

To prepare the compositions for readers, each composition was reproduced in typewritten and mimeographed form exactly as it had been written by the pupil. Extreme care was exercised to reproduce each error of whatever kind, and to retain all the



qualities or characteristics of the original composition.<sup>1</sup> At the head of each composition as it was written by the pupil were, the name, the age in years and months, and the school grade of the pupil, together with the name of the school and the date. When the compositions were mimeographed, each one was given a number and all the above marks of identification were omitted. By removing all marks of identification, each composition stood before each reader on exactly the same basis, and the chances were increased that it would be judged according to its inherent and intrinsic worth.

(c) *Instructions to Readers*

After the twenty-five compositions of each type had been thus prepared, one set was sent to each of the fourteen eighth grade teachers, and to each of ten elementary school principals. Instructions were given that each reader was to grade the compositions wholly independently.

Here are the instructions for grading the compositions:

In rating it is suggested that the following procedure be uniformly adopted:—

(a) Arrange the themes in a series in the order of their merit.

(b) To the theme considered to be the best give the arbitrary rating of 95%.

(c) Rate each of the remaining themes with reference to this standard, giving it a percentage value and entering the same on the sheet provided, both under "No. of Theme", and "Choice of Theme".

It should be borne in mind that these samples are eventually to serve as standards for eighth grade themes: it is important, therefore, in rating that all other considerations be set aside and that an "F", for example, be a reasonable eighth grade "F", etc.

Fixing the grade of the best composition at 95 % needs explanation. It was the feeling of those who organized this study that 95 % rather than 100 % might fairly represent the highest achievement of any eighth grade pupil in writing a composition. Further, it also seemed desirable that each reader should start from the same numerical starting point in arranging the compositions.

<sup>1</sup> Obviously, such qualities as neatness, legibility of handwriting, etc., were eliminated.

By asking each reader to give 95 % to the best composition, this desirable end would be secured. No lower limit was fixed, but the Newton readers knew that compositions worth much less than about 40 % were not to be furnished by schools for the experiment. This tended to fix the lower limits of the grading around 40 %. That it only tended to do so, and did not absolutely do so, is indicated by the fact that compositions were graded as low as 20 %. It was not the original intention to fix any other lower limit than the usual zero.

The following is the form of rating sheet:

*Ratings of Themes in Description*

For convenience in handling the ratings, readers are asked to enter their results in two columns: first, under the serial number of the theme give the rating, and second, under the order of choice give both number *and* rating, thus: (1) 85% and (1) 18-95%.

<i>Number of Theme</i>	<i>Choice of Theme</i>
1.....	1.....
2.....	2.....
3.....	3.....
Etc.	Etc.

## THE DESCRIPTION SCALE

### THE COMPOSITIONS USED

Following is the set of twenty-five compositions in description used in this experiment: they were sent to the readers in this form.

#### I

#### BELFAST, MAINE

The little town of Belfast is situated on the Penobscot Bay in Maine. Wishing to see all we can of this place and its surroundings we will climb to the belfrey of the Methodist Church. Our eyes fall first on the water which sparkles clear and blue on a summer's day. The shore, where children love to play is not a white sandy beach, but one of rocks and ledges.

Then we slowly turn our eyes to the town itself. They rest upon the churches, the post office a square red brick building, the

lumber mill and the shoe factory. Farther along we notice the steamboat wharf with one of the Boston boats just landing; and way over the other end of the town is a Sardine factory. Off in the distance stretch the green fields and blue hills. This surely is an ideal place to spend a summer vacation.

## 2

## THE POLEPHEMUS CATERPILLAR

There are three different kinds of Polephemus caterpillars, the one that I am going to describe is the largest. When he is at rest he measures three inches long, and three quarters of an inch in diameter. His color is green, and he has seven yellow bands up and down the side. At a distance he looks like a leaf. There is another line on the underside which runs from his head to his tail. There are silver spots on these lines which sparkle in the sun. He has the largest head of all the caterpillars it is about the size of a persons little finger nail. He has two pairs of powerful jaws, with which, if he is disturbed he will make a little click, like that of a watch. Every time he does this he makes gestures with his ugly head which makes him look quite fierce. His neck is something like some kodaks he can reach way forward and then close up again.

He has four pairs of prolegs which are very powerful. There are three pairs of true or butterfly legs or the legs near his head. His eyes are in two groups each group containing five eyes at the bottom of his head they are very strong for an insect. With them he can see seven or eight inches ahead of him.

Its feet have little have little hairs on them which enable him to get a strong grip on a leaf or twig. All of this description I have got my-self by studying them.

## 3

## THE BOY'S CLUB

In the town of Auburndale part of Newton is where club is situated to get there from the square you walk up Auburn Street till you get to the third street on the right this is Woodbine Ter-

race. Our club is in the second hous up in the garret it is a new room and in comparitvly good condition as you enter you see a book-case & a chair on the walls ther are rows of picturs in the back of the room there is a window and a cot on the right side there is a graphaphone and a box of records.

## 4

## THE LIGHTHOUSE

Twilight was falling as I strolled along the broad, sandy beach, now and then stumbling over a projecting rock.

Nothing was to be heard but the dull booming of the breakers on the over-hanging rocks and low beach, and the sad call of the gulls in their flight home-ward.

Something in the atmosphere told me a storm was brewing. A fog was gathering.

The rocks grew more rough and jagged as I advanced, and a tall, gray lighthouse loomed up in front of me, high above the rest of the scenery. Its great revolving light cast a warning ray across the angry water.

In the rear of this tall lighthouse rose a forest of pines, such as are found all along the Maine coast. Down the beach a little way was moored a large row-boat. On the right lay a little cove, like a haven to many a weary sailor.

As the fog grew heavier the lighthouse looked like a great guardian angel warning the sailors that dangerous rocks would wreck their vessels if they came too near.

## 5

## A LIGHTHOUSE

Right near my house there is a very high sort of a cliff. On the top of the cliff sets this very large lighthouse, it is mad of bricks which are painted white. It is a very high and wide one compared with most of the lighthouse. A little way down the side cliff they have made some kind of a construction to blow the fog-horn. On the top of this little building there is a very large bell which they use for different things. In back of the light there is

quite a good sized house which is a part of the lighthouse. In this house the keeper of the light lives and his family.

## 6

## AN EXCITING FIRE

"Fire! fire!" was the cry. Everybody was hustling and bustling about a peaceful country town. Fires were a very uncommon thing in that vicinity and the people were greatly aroused.

Then in the distance the faint sounds of the engines were heard. Louder and louder it grew until at last the engines were seen.

The people ran and the boys jumped on their bicycles for they wanted to see the fire before it was out. The crowd were gathering about a hay and grain barn.

Then as the fire engines sped around the corner the great hose was hitched to the hydrant. The firemen worked hard and in a few minutes the hose was pouring forth all its contents on the blazing barn.

## 7

## A CHRISTMAS MORNING

It was nine o'clock Christmas morning when a family of three children and their parents were entering the room where the Christmas tree stood. When they entered there were many shouts and excited faces. The tree was a tall one which reached to the ceiling it was covered with many glittering ornaments. Underneath the tree were all of the presents which were to be opened one at a time by the merry group. There were many games played.

After this they all went into the dining room, where the good smell of turkey and plum pudding existed.

## 8

## THE WOODS IN WINTER

The tiny pool, shaded in summer by thriving young birches, was now a crystal mirror. The rays of the morning sun gleamed

through the bushes, which sparkled like millions of diamonds. Their crust of ice had been formed in the night, and at dawn, the sun rose over a glistening world, for every twig and limb shone in a coat of ice or snow.

The pines, in the wood, were robed in white, and dazzled in their glittering garments. All nature gleamed in transparent whiteness, for the earth was one sparkling gem.

## 9

## THE APPROACHING TRAIN

It was quiet dark when the people were around the depot waiting for the next train to come. It was a cold and windy night for the people, the hackmen ran around and did everything to keep warm.

They were about thirty-five men, and about fifteen women, and a few boys. These people were all waiting for a train to go home. It was a cold night for the boys and they played tag to get warm.

The men and boys that came to the depot to get the papers and bundles had to hurry home, because of the cold weather, just about five minutes later, I heard the whistle. The bell in the depot began to ring, and I saw the train just taking the curve, when it reached to the depot, all the people were glad to get in and get warm, and the baggage-master gave the signal to start, and the train started off.

## 10

## A STORM IN A FISHING VILLAGE

It was a cold damp day in November. The sky was a heavy leaden color. In the east a black line stretched across it foretelling the coming of a storm. The houses across the way were dismal shadows, — flat, cold, heartless. A piercing chill penetrated to the bone. The rattle of a grocer's cart or the clatter of a horse's hoofs seemed cold. The pedestrians were all clothed in black, or else the feeble light made them seem so, and they were

cold — everything was cold, cold, cold. An awful loneliness pervaded all.

The black line in the east had grown into a cloud and was coming nearer, nearer, over the sea. Suddenly a gust of wind shook the very foundations of the houses, — another, and then a continuous blowing. The howling was horrible. Great sheets of foam were blown into the streets, — here and there a piece of wreckage hurled itself against a cottage. Fishermen's wives hurried down the narrow streets to the shore, straining their eyes for any sign of a wreck. Old seamen looked at the roaring sea and shook their heads.

By this time the black cloud had engulfed the sky. The day was like night, although it was not yet noon. Boys ran about with torches which were immediately extinguished, and the roaring called to mind the last day at Pompeii.

Rain had begun to descend. At first only drops fell on the hardened faces of old mariners, and on the pale countenances of wives, mingling with the drops already there. But soon great sheets fell, forcing the people indoors, to the poor shelter afforded by the groaning houses.

For about an hour the storm continued thus, then by degrees the wind lessened, though the rain still fell, and the ocean thundered. But soon the rain also slowly stopped and the roaring ceased. The black cloud rolled slowly away, leaving the tardy sun to shine on the drenched town and the great piles of wreckage on the shore.

## II

### MY FAVORITE PET

My favorite pet is a horse which I am very familiar with. He is a very large horse with a large chest. It is very old and his color is gray and white but mostly white. Its teeth are very sharp and big. His mane is cut short and rounds at the top. His neck is long and very broud. He has little black spots around his neck from wearing a big collar. When you fool with him he would try to bite you.

His tail is long and white which some parts are gray. Its hoof is very hard and if you hit it with a hammar you could not hert him. Its legs are of a dapple gray. Around which the shoe goes. Its mouth it is very black. By his hoof there is a black spot where he was cut by a barb wire. He has a very small hoof and his heir is very long at the hoof.

## 12

## A COUNTRY VILLAGE

There is a very old village called East Foxboro. Just as you get of the train the first thing you see is a quiet little village with railway tracks running through the centre, on one side is a large depot as large a city depot. Just beside that is a small store and post-office all in one. Joined on to that is a barn. On the other side is a freight-house with running to it. In back of that is a dry-good, newspaper, candy, tonic, and postcard store. Not far from that is a pump and wooden box in which the water falls for horses. Nearby is a shed in which gasoline, oil and kerosene is sold. Just across the well worn road is a signal station which is largely used but very old.

## 13

## GRANDMOTHER

In front of the open fire place in a large armchair there sits our old Granny. She is old and feeble. Her hair is snow-white and over her head a little white cap is carefully tied. Her face is full of wrinkles and her keen blue eyes sparkle through a pair of glasses which she has on her nose.

She has a shawl thrown over her shoulders and she also wears a thick black skirt. On her feet can be seen a pair of soft slippers which she prizes very much because they were given her for a Christmas present.

As you know Grannies always like to be busy our Granny is busy knitting gloves. Her hands go to and fro. She will keep on working until her knitting is done. Now that it is done she carefully folds her work and packs it into her work-basket.



Then she trots upstairs to bed and oh, how lonesome it is when our dear Granny is gone from the room.

## 14

## THE DESCRIPTION OF A PLACE IN MAINE

As we stand in the door of the log cabin and directly across a lake which is about fifty yards away from the front of the log cabin we see some of the woods of Maine, and as we look a little to the left of the lake Squaw mountain may be seen. On clear days the top of the mountain can be seen and sometimes the Old Squaw's face can be seen (it is of stone). On rainy days only the outline of the lake can be seen, and sometimes it is so very foggy that the lake can hardly be seen from the door of the of the cabin. Sometimes a deer can be seen very early in the morning.

## 15

## THE VIEW FROM MT. WASHINGTON

The clouds parted, and, far below us, the country was bathed in sunshine. Everything was very small. The Mt. Washington hotel looked like a cottage, though it was the largest building for miles around.

Here and there, small farm houses dotted the landscape. Occasionally a river, or stream, wound its way, like a blue thread, through the green meadows. In the meadows nearest us, small black specks could be seen. With the aid of field glasses, the specks proved to be horses and cows.

The roads looked like yellow threads, along which, black specks moved. Looking from the other side of the mountain, the railroad which came up the mountain, could be followed.

Other mountain tops surrounded us on all sides. There was one valley, that was so completely surrounded by mountains, that there seemed no way to leave it.

The whole country was clothed in green, while the sky was blue, with fleecy clouds floating lazily across it. Clouds of smoke, showed here and there against the green hills. Suddenly the clouds came to-gether, and, we saw no more.

## 16

## A PICTURE

On the wall in the front of the schoolroom hangs a large picture, with a frame of dark wood. The name, I am not sure of.

In the background is a dense forest with an opening at the left hand corner, where, far away in the distance, can be seen the beautiful tinted sky. The ground is covered with snow, and in the foreground a few trees and boulders are scattered here and there.

The centre of attraction is the number of Puritan people walking in the opening. Some men carry guns in defense from the Indians. Many small children are by their mother's side, and most all carry a Bible.

The men are dressed in brown doublets, wearing short, knee length trousers, with leggings and brown leather boots, stiff white collars and cuffs, gray hats, with high crowns and wide brims, carrying guns across their shoulders.

The women wears capes with attached hoods, some green, white and yellow. Some wear the black bonnets with a white band on the edge. In the right hand corner more men are coming along.

From this description I should name this characteristic picture, "Puritans on their way to church."

## 17

## FLANDERS LAKE

There! see? the blue lake just at the end of the path, and there's the big ledge on which there are so many comfortable nicks and crannies to sit in. Way across this lake is Sckoodic, grand old mountain, with the little camps scattered about at its feet.

Come, let's sit down and rest. Here and there rocky points jut out into the lake terminating in massive boulders. Between these points are beautiful stretches of coarse sand that glisten like so many jewels and particles of gold and silver in the sun.

Groves of young birches growing close to the water's edge are dotted here and there with small pines and spruce. Back of these birches is a veritable forest of pines, spruce, balsam, and other varieties of evergreen which rend the air fragrant with their soothing odor.

But see, it is getting dark and we had better start our walk home through these fragrant woods for even the busy king-fisher has stopped his rattle.

## 18

## AN OLD-FASHIONED FARMHOUSE

On a dusty country road in Concord, which is not far from here, there stands an old-fashioned farmhouse. The roof slopes down to the porch over which a honeysuckle vine grows. The clapboards are stained and weatherbeaten. The windows are small and have small panes in them. On them are queer, old-fashioned shutters.

At one side of the house there is an old-fashioned barn which appears to be large and airy but is much in need of repair. Some of the windows are broken and are filled with hay, and the doors after many years of hard service are partly off their hinges. The once gilded weather-cock has changed its gilt to rust.

When one thinks of the house and barn together it reminds them of the comforts of the old days.

## 19

## A SILENT STRANGER

All is still on the lake? Oh no! A fish leaps out of the dark water his scales glissing in the moonlight. All is still in the forest behind? — No! — A rabbit jumps out of the ferns on the bank, stares a moment, then leaps into the bushes.

Ah! — What is that so silent in the shade over there? A tall youth clad in buckskin with fringe on his shirt and leggings, a buffalow horn on one side and a buckskin pouch on the other held on by a leatheron thongs over his broad shoulders, broader than any I had ever seen before, a skilfully decorated sheath in which

was a sharp knife fastened to a buckskin band around his waist. Held carelessly in his arms was a long-barroled rifle. He was sturdy, strong and fearless, deeply tanned, with black eyes so sharp that they could peerce the darkness of the forest.

I looked away for a moment. When my gaze was again directed on the spot where I had seen the silent stranger he disappeared. Heavy as he was not a twig snapped or a leaf rustle beneath his feet.

About fifteen munites after when I was looking along the shore I saw a canoe glide silently out on the lake headed for the other shore. In that canoe was the silent stranger who had so mysteriously disappeared. Not a sound came from his paddle as the canoe sped swiftly along.

## 20

## AN OLD SCHOOL HOUSE

It was a low studied old School-house, which stood on the country road between Wissing and Eustace, New York. Windowless and partially roofless it stood, as though it had nary a friend with the exception of the cold winter air, as it leaped boldly through the bare cracks in the side of the structure. The door, which was nearly hidden from view, was swinging solemnly back and forth on two rusty hinges. Really it was only one, as the other was merely a piece of worn-out iron, which dangled loosely in the draft of the swaying door. The old wooden desks could no more be called varnished, as the dust, and the numerous inkstains on them, hid all signs of it from observation. Yet, by the various initials which were carved on the wood-work, it was very evident that at one time it was not forsaken. The old clock on the wall was motionless, and the hands which had once explained the time, no longer looked like hands, but like little ink spots across the forlorn face. Then there were the blackboards, covered with pictures of every description, with the scribbled signatures of teachers, written rudely under them. The old text books with no covers lay stranded on the wornout floor, and the stove, which once had been used for warmth, stood

idely on top of the old rug which had, long years ago, served for a carpet.

Such was the appearance of the first country schoolhouse I ever was in.

## 21

## A MANSION

As you look across the road you will first see a long private avenue or walk.

It is in the summer, and on each side of this long walk are some beautiful, stately elms. They are hundreds of years old and they have done their duty for as many years, shading the walk from the noon sun.

Cross the road and you will see if you look up the avenue, a beautiful mansion. It is a colonial house and four large pillars are upholding the roof. A piazza runs along three sides of the house.

Near the house is a tennis court where for years the occupants of the mansion have passed many an hour.

Let us enter the mansion. It is a beautiful cool place, although dark. As we enter we see large psalms on each side of the entrance. On the floors are old oriental rugs which have been handed down for generations. In the parlor is a harp, and on the walls are the portraits of the ancestors. In all, it is a beautiful place.

## 22

## THE LAKE AT SUNRISE

In the Mountains of Pennsylvania there is a little lake.

On one side of the lake is a boat landing, at which a dozen or more boats are tied up. On this boat landing one may stand and look up the lake, at sunrise, and see the sun peeping up over the top of the mountains and shinning on the water. Than a King Fisher flies down the lake making his cheerful noise, instantly, all the other birds begin to chirp as if their life depended on it.

Looking across the lake one would see numerous wells and coves backed up by woods from which comes the chirp of the

birds. Hearing the explosions of cylinders we look to see where in comes from and find a pumphouse that keeps the lake supplied with water.

Looking down the lake over the dam to the ice house with the roof sparkling with. On the roof of the house a hawk is sitting adding his clear whistles to noise of other birds.

Looking around to the woods, at our back, with an old oil well in front of them. The birds flying from the woods in flocks, and far away from the hills comes the sound of the of Italians singing.

## 23

## A LIGHT HOUSE

A description of a light house is quite interesting.

First a light house is generally situated on a mass of rocks in the ocean or on some great lake. And then to get into a light house is a question. Some times you have to climb to the top on a steal ladder, and again you only have to go half way up and you find sort of a steal porch which is very strong with a door in the side of the light house. On the very top of the light there is generally two or three life boats in case of accident. In side there is an enormous light which flashes every two minutes and sometimes more often it depends holy on the weather. The man himself has very favorable sleeping quarter and food it is a very lonely life except when you have a man with you. Sometimes they play cards all day long until it is time to fix the lights and then they are very busy.

## 24

## A SMASH-UP

It was early one morning last spring, when an auto belonging to Harry Atwood coming from New York, run into a car at Auburn St. The auto was going at a good rate when it struck the car. When the auto struck the car it made a hole in the side of the car.

His auto was a red one and on each side it had his name in black letters Harry Atwood. The lights were broken and the

mud guard were too. The front of the auto was jamed. It was a auto that would seat four people. With a cover to keep the rain out. There was marks where they had pushed the auto off the track. That afternoon it was carried away.

## 25

## A SCENE ON THE PRAIRIE

Along a large plain in the west with mountains on all sides. The sun was just sinking behind the mountains. Some trappers were on the plain just about to get their supper. They had one tent because there was just three of them. Beside their tent tripled a little spring. After the three trappers had eating there supper they sat down by the fire because it had growing dark. All of a sudden a bunch of Indain's came riding up. When they came near they fired of their guns and disappered in the darkness and the trappers turned into camp leaving one a the trappers on gaurd.

## THE TABULATION OF RESULTS OF READINGS

## (a) THE GRADE BASIS

When the readers made their reports showing the grades which they had given each composition these grades were summarized in the following table.

Table I shows the grade that each of the twenty-four readers gave each of the twenty-five compositions in description.

TABLE I

No. of Reader	Number of the Composition																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	75	80	40	90	50	77	65	83	48	95	50	55	86	45	88	70	76	73	78	85	76	47	45	30	20
2	72	75	42	75	60	63	53	90	55	95	47	62	82	58	92	85	75	70	68	80	75	65	57	52	45
3	83	64	50	87	52	65	55	79	60	95	40	45	83	78	91	75	89	72	71	92	54	70	59	44	48
4	82	90	30	90	60	80	70	92	45	95	45	60	88	40	92	90	80	82	78	75	75	45	42	40	
5	90	88	50	91	73	80	73	95	70	95	55	75	85	70	93	80	85	90	75	88	75	65	58	60	45
6	75	85	45	85	55	75	60	70	75	90	65	65	95	45	85	85	85	80	90	80	80	65	65	45	55
7	83	78	40	63	60	75	75	80	59	95	50	60	75	52	90	80	82	79	78	85	78	73	58	61	52
8	73	80	45	85	60	60	55	90	60	95	50	60	85	50	90	80	70	75	70	80	80	60	65	50	55
9	83	85	40	70	50	55	65	60	50	95	40	60	75	40	90	70	63	73	92	87	80	77	60	40	40
10	85	80	40	75	65	50	60	70	50	95	40	60	75	55	90	70	70	75	90	90	78	75	60	45	40
11	83	84	50	90	68	80	70	93	65	95	58	73	87	65	83	77	81	87	78	85	80	75	65	60	50
12	80	70	45	85	65	65	58	88	45	95	50	60	90	60	93	68	78	80	75	85	70	53	45	55	45
13	83	82	40	94	78	88	80	84	68	95	50	75	90	65	93	91	92	87	81	85	89	86	74	73	45
14	95	88	50	85	70	78	70	95	60	95	50	65	80	75	90	80	88	90	85	88	80	70	55	58	45
15	92	85	45	86	58	76	74	92	60	95	45	70	85	58	86	69	83	74	78	70	73	71	45	55	45
16	90	78	40	88	58	50	72	52	40	95	46	42	71	40	92	75	72	60	80	73	74	65	45	42	42
17	90	82	40	83	58	64	60	78	63	95	55	45	93	65	94	70	80	75	84	85	85	68	50	50	40
18	76	74	43	90	60	70	66	86	58	95	45	53	79	63	93	91	87	84	80	72	82	50	56	46	40
19	92	89	45	93	70	75	47	93	60	95	57	67	92	48	83	86	88	78	85	85	78	71	65	52	62
20	68	70	40	75	58	62	65	70	52	95	48	55	85	50	88	72	72	74	90	80	66	65	60	45	42
21	82	80	45	79	75	72	40	93	65	91	60	68	89	50	95	85	80	88	60	90	80	77	55	40	48
22	74	72	40	86	60	68	60	80	52	95	45	60	75	60	80	73	85	75	78	84	73	63	60	50	50
23	78	82	39	84	55	63	62	93	45	95	49	61	82	55	89	80	93	73	80	78	71	62	40	38	44
24	83	79	40	93	53	69	70	70	42	95	49	42	80	45	90	73	80	66	83	79	75	50	42	42	40

This table shows that reader No. 1 gave composition No. 1, 75%: composition No. 2, 80%: composition No. 3, 40%, and so on. By following the vertical column of figures under any given composition (e. g. No. 1) one can see the variety of grades given that

<sup>1</sup> For obvious reasons, each reader was given a number. This number the reader retained throughout this investigation. A reader may find out what his number was by addressing the author of this monograph.



composition. To facilitate such an observation, the following table has been prepared.

Table II shows the grades given each composition in description arranged in a descending order without designating the readers who gave them.

TABLE II

Number of the Composition

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
95	90	50	94	78	88	80	95	75	95	65	75	95	76	95	92	93	90	92	92	89	86	74	73	62
92	89	50	93	75	80	75	95	70	95	60	75	93	75	94	91	92	90	90	90	85	77	65	61	55
92	88	50	93	73	80	74	93	68	95	58	73	92	70	93	91	90	88	90	90	82	77	65	60	55
90	88	50	91	70	80	73	93	65	95	57	70	90	65	93	86	89	87	90	88	80	75	65	60	52
90	85	45	90	70	78	72	93	65	95	55	68	90	65	93	85	88	87	85	88	80	75	65	58	50
90	85	45	90	68	77	70	93	63	95	55	67	89	65	93	85	88	84	85	87	80	75	60	55	50
85	85	45	90	65	76	70	92	60	95	50	65	88	63	92	85	87	80	84	85	80	73	60	55	48
83	84	45	90	60	75	70	92	60	95	50	65	87	60	92	80	85	80	83	85	80	71	60	52	48
83	82	45	88	60	75	70	90	60	95	50	62	86	60	92	80	85	80	82	85	80	71	60	52	45
83	82	45	87	60	75	66	90	60	95	50	61	85	58	91	80	85	79	81	85	78	70	59	50	45
83	82	43	86	60	72	65	88	60	95	50	60	85	58	90	80	83	78	80	85	78	70	58	50	45
83	80	42	86	60	70	65	86	59	95	50	60	85	55	90	80	82	75	80	85	78	68	58	50	45
83	80	40	85	60	69	65	84	58	95	49	60	85	55	90	77	81	75	80	85	76	65	57	46	45
82	80	40	85	60	68	62	83	55	95	49	60	85	52	90	75	80	75	78	84	75	65	56	45	45
82	80	40	85	58	68	60	80	52	95	48	60	82	50	90	75	80	75	78	80	75	65	55	45	44
80	79	40	85	58	65	60	80	52	95	47	60	82	50	90	73	80	74	78	80	75	65	55	45	42
78	78	40	84	58	65	60	79	50	95	46	60	80	50	89	73	78	74	78	80	75	65	50	44	42
76	78	40	83	58	64	60	78	50	95	45	55	80	48	88	72	76	73	78	80	74	63	45	42	40
75	75	40	79	55	63	58	70	48	95	45	55	79	45	88	70	75	73	75	79	73	62	45	42	40
75	74	40	75	55	62	55	70	45	95	45	53	75	45	86	70	72	73	75	78	73	60	45	42	40
74	72	40	75	53	60	55	70	45	95	45	45	75	45	85	70	72	72	71	78	71	53	45	40	40
73	70	40	75	52	55	53	70	45	95	40	45	75	40	83	70	70	70	70	73	70	50	45	40	40
72	70	39	70	50	50	47	60	42	91	40	42	75	40	83	69	70	66	68	72	66	50	42	38	40
68	64	30	63	50	50	40	52	40	90	40	42	71	40	80	68	63	60	60	70	54	47	40	30	20

This table shows how each composition was treated by all twenty-four of the readers. Under the number of the composition at the head of each column is given the various grades which that composition received. For example, composition No. 1 was graded 95% by one reader: 92% by two readers: 90% by three readers, and so on. The highest grade given composition No. 1 was 95%, and the lowest 68%.

Table III gives (a) the highest grade, (b) the lowest grade, (c) the maximum variation, (d) the mean or average grade, and (e) the median grade, for each of the twenty-five compositions in description.

It will be recalled that each reader was instructed (*a*) to select the best composition and arbitrarily give it a grade of 95 %, and (*b*) to arrange the remaining compositions in the set in a descending order of merit. The purpose of the direction was to make each reader start from the same numerical starting point. In view of these instructions, and also in view of the fact that by grading each composition the reader also necessarily had to ar-

TABLE III

Composition Number	Highest Grade	Lowest Grade	Maximum Variation	Mean or Average Grade	Median <sup>1</sup> Grade
1	95	68	27	91.9	83.0
2	90	64	26	80.0	80.0
3	50	30	20	42.7	41.0
4	94	63	31	84.3	85.5
5	78	50	28	61.1	60.0
6	88	50	38	69.4	69.5
7	80	40	40	63.5	65.0
8	95	52	43	82.3	85.0
9	75	40	35	56.1	58.5
10	95	90	5	94.5	95.0
11	65	40	25	49.5	49.5
12	75	42	33	59.9	60.0
13	95	71	24	83.7	85.0
14	76	40	36	55.4	53.5
15	95	80	15	89.6	90.0
16	92	68	24	78.2	78.5
17	93	63	30	81.0	81.5
18	90	60	30	79.9	75.0
19	92	60	32	79.6	80.0
20	92	70	22	82.7	85.0
21	89	54	35	76.1	77.0
22	86	47	39	66.6	66.5
23	74	40	34	55.4	57.5
24	73	30	43	48.9	48.0
25	62	20	42	44.9	45.0

<sup>1</sup> "Median grade" is the grade in the series of grades above which and below which there is an equal number of grades.

For the definition of statistical terms used, and the methods of computation, see Thorndike, *Mental and Social Measurements*, The Science Press, New York, Whipple, *Manual of Mental and Physical Tests*, Warwick & York, Inc., Baltimore.

range them in an order of merit, it is possible, in considering the results, to use not only the grade basis but also the rank basis for selection. From the grades given in Table II, we have computed the maximum variation, and the mean or average grade and the median grade as shown in Table III. As a further basis for selecting the compositions for the scale, and as a check on the above items, we have also computed the same items on the basis of the ranking of each composition, i. e., on the basis of the relative position of each composition among the twenty-five specimens in the set.

### (b) THE RANK BASIS

Each reader was directed to select the best composition and arbitrarily to give it a grade of 95 %. Since each of the twenty-four readers did so, it is fair to assume that they gave equally careful attention to the second direction, to arrange the other compositions in the order of their relative merit from 95 % down. There is no reason to believe that readers were either more or less careful about the intrinsic or inherent worth of the compositions as represented by the grades given them than they were about the relative merits of compositions as indicated by their relative ranks. The result of the ranking of the twenty-five compositions by the twenty-four readers is given in the following table.

Table IV shows the ranking of each composition in description by each reader.

This table shows that reader No. 1 selected composition No. 10 as first in rank, composition No. 4 as second, composition No. 15 as third, and so on. Reading the table from top to bottom, one finds in each column the different compositions that have been assigned any given rank. For example, composition No. 10, is first choice of twenty-one out of twenty-four readers. Reader No. 6, selected composition No. 13 as first in rank, and reader No. 14 selected composition No. 8 as first, and reader No. 21 selected composition No. 15 as first.

In order to show still more clearly the significance of the material in this table, each composition has been dealt with by

TABLE IV

No. of Reader	Choice in Rank																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	10	4	15	13	20	8	2	19	6	21	17	1	18	16	7	12	5	11	9	22	14	23	3	24	25
2	10	15	8	16	13	20	2	4	17	21	1	18	19	22	6	12	5	14	23	9	7	24	11	25	3
3	10	20	15	17	4	13	1	8	14	16	18	19	22	6	2	9	23	7	21	5	3	25	12	24	11
4	10	15	16	8	17	2	4	13	19	1	6	18	20	21	22	7	5	12	11	23	9	24	25	14	3
5	10	8	15	4	18	1	2	20	17	13	6	16	19	12	21	5	7	9	14	22	24	23	11	3	25
6	13	19	10	4	15	17	16	2	18	20	21	1	6	9	8	11	12	22	23	7	5	25	3	14	24
7	10	15	20	1	17	16	8	18	21	2	19	13	6	7	22	4	24	12	5	9	23	14	25	11	3
8	10	15	8	4	13	20	2	16	21	18	1	19	17	23	22	12	6	9	5	25	17	11	24	14	3
9	10	19	15	20	2	1	21	22	13	18	4	16	7	17	8	23	12	6	5	9	25	24	14	11	3
10	10	20	19	15	1	2	21	22	18	13	4	17	16	8	5	7	23	12	14	6	9	24	3	11	25
11	10	8	4	13	18	20	2	1	15	17	6	21	19	16	22	12	7	5	14	23	9	24	25	11	3
12	10	15	13	8	20	4	1	18	17	19	2	21	16	6	5	14	12	7	24	22	11	9	23	25	3
13	10	4	15	17	16	13	21	6	18	22	20	8	1	2	19	7	5	12	23	24	9	14	11	25	3
14	8	1	10	15	18	2	17	20	4	19	13	16	21	6	14	5	7	22	12	9	24	23	3	11	25
15	10	1	8	4	15	2	13	17	19	6	7	18	21	22	12	20	16	9	14	5	24	11	23	25	3
16	10	15	1	4	19	2	16	21	20	7	17	13	22	18	5	8	6	11	23	24	12	25	9	14	3
17	10	15	13	1	20	21	19	4	2	17	8	18	16	22	14	6	9	7	5	11	24	23	12	25	3
18	10	15	16	4	17	8	18	21	19	13	1	2	20	6	7	14	5	9	23	12	22	24	11	3	25
19	10	4	1	8	13	2	17	16	19	15	20	18	21	6	22	5	12	23	25	9	11	24	14	7	3
20	10	19	15	13	20	4	18	17	16	2	8	1	21	22	7	6	23	5	12	9	14	11	24	25	3
21	15	8	10	20	13	18	16	1	2	17	21	4	22	5	6	12	9	11	19	23	14	25	3	7	24
22	10	4	17	20	15	8	19	18	13	1	21	16	2	6	22	5	12	7	23	14	9	24	25	11	3
23	10	8	17	15	4	2	13	16	19	20	1	18	21	16	7	22	12	5	14	11	9	25	23	3	24
24	10	4	15	1	19	13	17	20	2	21	16	8	7	6	18	5	22	11	14	24	12	9	23	25	3

itself. If one had table IV before him and were asked how the readers ranked composition No. 1 he could see by consulting the table, that reader:—

No. 1	ranked	composition	No. 1,	12th
No. 2	ranked	the same composition	11th	
No. 3	"	"	"	7th
No. 4	"	"	"	10th
No. 5	"	"	"	6th
No. 6	"	"	"	12th
No. 7	"	"	"	4th, and so on.

To show these facts about each composition in the most convenient form a distribution was prepared for each composition showing the rank given that composition by each of the twenty-four readers. Here is such a distribution for composition No. 1.

## COMPOSITION NO. 1

## Rank

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
..	..	..	..	..	..	..	..	..	..	23	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	..	..	24	..	..	..	..	..	..	18	20	..	..	..	..	..	..	..	..	..	..	..	..	..
..	15	19	17	..	9	12	21	..	22	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..
..	14	16	7	10	5	3	11	..	4	2	1	13	..	..	..	..	..	..	..	..	..	..	..	..

The series of numbers at the top ranging from one to twenty-five, represents the possible ranks, any one of which this composition might have been assigned by the readers. The figures near the bottom are the numbers of the readers giving composition No. 1 the ranks indicated. For example, composition No. 1 was ranked second by readers Nos. 14 and 15; it was ranked third by readers Nos. 16 and 19; it was ranked fourth by readers Nos. 7, 17, and 24, and so on. Similar distributions were prepared for each composition, but space does not permit of their introduction in this monograph. They may be prepared from Table IV by anyone interested.

These distributions show that readers agreed well as to the rank of some compositions, while in other cases the greatest difference in judgment prevails. For example, composition No. 10 is ranked first by twenty-one out of twenty-four readers, and one of these three gave it the highest grade, viz. 95%. In the case of composition No. 8, there seems to be little agreement. One reader ranks it as high as 1st, while one ranks it as low as 16th: the remaining readers are scattered between these two extremes, with a group of four readers ranking it in second place. Obviously, a scattering distribution means a wide diversity of judgments in ranking, and conversely, a heaping up of the figures under a few ranks means a greater unanimity of judgments among readers. The following table shows a summary of the distribution for each composition.

Table V shows the distribution of the ranks given each composition in description. Compositions are arranged in serial order according to the "Median Ranks," beginning with Median Rank I.

TABLE V

Comp. No.	Median Rank	Rank																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
10	1.0	21	.	3	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
15	3.0	1	8	7	3	3	.	.	.	1	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
4	4.5	..	5	1	6	2	2	1	2	1	.	2	.	1	.	.	1	.	.	.	.	.	.	.	.	.
8	6.0	1	4	3	3	.	3	1	1	.	.	2	2	.	1	2	1	.	.	.	.	.	.	.	.	.
13	6.0	1	.	2	3	4	3	2	1	2	3	1	2	.	.	.	.	.	.	.	.	.	.	.	.	.
20	6.0	..	2	1	3	4	3	.	3	1	2	2	.	2	.	.	1	.	.	.	.	.	.	.	.	.
2	7.0	..	.	.	.	1	7	5	1	3	2	1	1	1	1	1	.	.	.	.	.	.	.	.	.	.
1	7.5	..	2	2	3	1	2	2	2	.	2	4	3	1	.	.	.	.	.	.	.	.	.	.	.	.
17	8.0	..	.	2	2	3	1	3	2	3	3	2	1	1	1	.	.	.	.	.	.	.	.	.	.	.
19	9.0	..	3	1	.	2	.	2	1	5	2	1	2	3	.	1	.	.	.	1	.	.	.	.	.	.
18	9.0	..	.	.	.	3	1	2	3	3	2	1	6	1	1	1	.	.	.	.	.	.	.	.	.	.
16	9.5	..	.	2	1	1	1	3	3	1	1	1	4	3	2	.	1	.	.	.	.	.	.	.	.	.
21	11.0	..	.	.	.	.	1	3	2	2	3	3	2	5	1	1	.	.	.	1	.	.	.	.	.	.
6	14.0	..	.	.	.	.	.	.	1	1	1	3	.	2	8	2	2	2	1	.	1	.	.	.	.	.
22	15.0	..	.	.	.	.	.	.	2	.	1	.	.	3	4	6	1	1	2	.	3	1	.	.	.	.
7	16.5	..	.	.	.	.	.	.	.	.	1	1	.	2	1	4	3	3	4	.	1	2	.	.	2	.
5	17.0	..	.	.	.	.	.	.	.	.	.	.	.	1	3	5	5	3	4	2	1	.	.	.	.	.
12	17.0	..	.	.	.	.	.	.	.	.	.	.	.	1	1	5	6	4	2	1	2	.	2	.	.	.
23	19.5	..	.	.	.	.	.	.	.	.	.	.	.	1	1	3	1	6	3	1	4	4	.	.	.	.
14	19.5	..	.	.	.	.	.	.	.	1	.	.	.	.	2	2	.	1	6	1	3	2	2	4	.	.
9	20.0	..	.	.	.	.	.	.	.	.	.	.	.	1	.	1	2	4	1	6	6	2	1	.	.	.
11	22.0	..	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	4	1	2	2	3	4	6	1	.
24	22.0	..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	1	3	4	8	2	2	3	.
25	23.5	..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	1	1	5	4	7	5	.
3	25.0	..	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1	.	5	3	15	.

Not only is there great diversity of judgments among readers, but there are cases where some readers seem to be extremely radical in their judgment of a composition on which other readers agree. For example, one reader ranks composition No. 4, 16th, while most of the other readers rank it from 8th to 9th, to 2d or 3d. Several readers seem likewise to be radical or extreme in their judgment of the rank of composition No. 7. In view of these observations we were led to adopt a method of segregating that 25% of the readers who were radical or extreme in their ranking. The lines were drawn in the distributions so as to cut off the 25% or less of the readers who were considered extreme. The maximum variation, both of the whole series and of the central 75% of the cases, has also been computed for each composition. The following table shows these statistical facts.

Table VI shows (a) the highest rank, (b) the lowest rank, (c) the maximum variation in rank of the series, (d) the maximum variation of 75% of the cases, (e) the median rank, (f) the average deviation for each of the twenty-five compositions in description.

TABLE VI

Composition Number	Highest Rank	Lowest Rank	Maximum Variation in Series	Maximum Variation of 75% of Cases	Median Rank	Average Deviation
1	2	13	11	8	7.5	3.17
2	5	15	10	4	7.0	2.17
3	21	25	4	2	25.0	.71
4	2	16	14	6	4.5	2.83
5	14	21	7	5	17.0	1.46
6	8	20	12	6	14.0	2.00
7	10	24	14	7	16.5	2.67
8	1	16	15	10	6.0	4.04
9	14	23	9	4	20.0	1.58
10	1	3	2	0	1.0	.25
11	16	25	9	5	22.0	2.08
12	14	23	9	4	17.0	1.71
13	1	12	11	7	6.0	2.50
14	9	24	15	6	19.5	2.75
15	1	10	9	3	3.0	1.33
16	3	17	14	7	9.5	3.25
17	3	14	11	7	8.0	2.58
18	5	15	10	6	9.5	2.46
19	2	19	17	8	9.0	3.25
20	2	16	14	7	6.0	3.00
21	6	19	13	6	11.0	2.38
22	8	21	13	7	15.0	2.46
23	14	23	9	4	19.5	2.00
24	17	25	8	4	22.0	1.38
25	19	25	6	3	23.5	1.29

## SELECTING THE SCALE

## (a) THE BASIS

In the preceding pages, the following statistical information has been worked out as a basis for selecting the six compositions for the proposed scale:

A. From the grades given each composition by the twenty-four readers.

(a) The maximum variation in grades.

(b) The mean or average grade.

(c) The median grade.

B. From the rank or relative position assigned each composition by the twenty-four readers.

(a) The maximum variation of the whole series.

(b) The extreme variation of 75% of the most central cases.

(c) The median rank.

(d) The average deviation.

## (b) FIXING STANDARD REQUIREMENTS

Before selecting the scale on the basis of this information it is necessary to answer these questions. What are the standard or ideal requirements for each of the six compositions of the proposed scale in terms of the suggested basis of selection? What ought the maximum variation, the mean, and the median to be, according to the grade basis of selection? What ought the two maximum variations, the median rank, and the average deviation to be, according to the rank basis of selection? We shall now proceed to answer these questions, so far as we can.

## MAXIMUM VARIATIONS AND AVERAGE DEVIATIONS

Large maximum variation, in either the grades or ranks, indicates great diversity of judgment among the readers, and conversely small maximum variation indicates better agreement in judgment among readers. The former has been shown in the case of composition No. 8, and the latter in the case of composition No. 10 (See p. 34). Obviously, although no definite fixed



standard for variations can be established for any of the six compositions of the proposed scale, it will be agreed that, other things being equal, that composition is most suitable for a place in the scale about which there is greatest agreement in judgment both in grade and rank, as shown by a small maximum variation and a small average deviation.

### THE MEAN, OR AVERAGE GRADE

The standard requirements of the mean or average grade for each of the six compositions of the scale is not difficult to determine. Our object in this whole study is to secure a scale of six compositions which shall be as nearly as possible, typical, 95 %, 85 %, 75 %, 65 %, 55 %, and 45 % compositions. Since our ultimate object is expressed in these figures, the six compositions selected ought to have a mean or average grade of 95 %, 85 %, 75 %, 65 %, 55 %, and 45 % respectively.

### THE MEDIAN GRADE

What has been said about the mean or average grade applies also to the median grade. The six compositions for the scale should have respectively a median grade of 95 %, 85 %, 75 %, 65 %, 55 %, and 45 %.

### THE MEDIAN RANK

The standard requirements for the median rank require some explanation. It is important that the six compositions of the scale should be approximately the same distance apart in rank. A difference of 10 % divides them in grades: how many points in rank should divide them ? There are twenty-five ranks, to any one of which a composition may be assigned by any reader. In view of the fact that there are to be six compositions in the scale, there must necessarily be five spaces or steps in the series. The problem then, is to divide the total points in rank between the first and last compositions in the series into five equal divisions so that the six compositions selected for the scale will be equidistant one from the other.

It is obvious that beginning with the A or 95 % composition, that composition should have a median rank of 1.0. Deducting this one from the twenty-five ranks, the total number, we have twenty-four points of rank remaining to be divided into five equal divisions. This gives 4.8 points in rank for each of the spaces between compositions. By adding this amount 4.8, to 1.0, the median rank of the A or 95 % composition, we have 5.8, the median rank of the B or 85 % composition of the scale. By adding 4.8 to each succeeding median rank we find the following median rank for each of the six compositions.

	Median Rank
A or 95 % composition.....	1.0
B or 85 % " .....	5.8
C or 75 % " .....	10.6
D or 65 % " .....	15.4
E or 55 % " .....	20.2
F or 45 % " .....	25.0

Because the ranks in the graphs are given only in whole numbers or in whole numbers and halves, it is clear that the decimals in the above median rank numbers cannot be exactly obtained. However, the median rank for each of the compositions in the scale should be as near the above standard median ranks as possible.

#### SUMMARY

From the above discussion, we may summarize the standard requirements for each of the six compositions of the proposed scale. As has been already stated, there is no fixed standard requirement in the case of maximum variations, or average deviation, either in grade or in rank. The only principle to follow is this: the narrower the maximum variation the better.

The other items are summarized as follows:

Grade or Rank of Composition in Scale	Mean or Average	Median Grade	Median Rank
A Grade or 95 % .....	95 %	95 %	1.0
B Grade or 85 % .....	85 %	85 %	5.8
C Grade or 75 % .....	75 %	75 %	10.6
D Grade or 65 % .....	65 %	65 %	15.4
E Grade or 55 % .....	55 %	55 %	20.2
F Grade or 45 % .....	45 %	45 %	25.0

## (c) MAKING THE SELECTION

The first step in the selection of the six compositions to constitute the scale was to classify the twenty-five compositions into six groups corresponding to the six grades or ranks of compositions in the proposed scale. Each composition was placed in that group with which it was most closely identified according to the several statistical items in the table. Such a classification results as follows:

				In general	Composition Nos.
A group of compositions (All from 90% up)					10-15.
B	"	"	"	( " " 80 to 89%)	1-2-4-8-13-17-19-20.
C	"	"	"	( " " 70 " 79%)	16-18-21.
D	"	"	"	( " " 60 " 69%)	5-6-7-12-22.
E	"	"	"	( " " 50 " 59%)	9-14-23.
F	"	"	"	( " " 40 " 49%)	3-11-24-25.

Having thus classified the twenty-five compositions, the next step was to select the one from each group which was shown by the standard requirements to be most suitable for the scale. Beginning with the A or 95% composition, we shall consider each group in order. In tabular form are given the numbers of the compositions which are to be considered for that particular place in the scale, together with all the statistical data pertaining to each composition. Preceding the table in each case are given the standard requirements for the composition as worked out in the preceding pages. Following the table is the discussion leading to the selection of the most satisfactory composition.

## "A" GRADE OR 95% COMPOSITION

## Standard Requirements:

Mean or average grade.....	95%
Median grade.....	95%
Median rank.....	1.0

TABLE VII

## EXPLANATION

Letters in the following table designate the following topics:—

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75% of the central cases; (k) The median rank; and (l) Average deviation.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>
10 <sup>1</sup>	95	90	5	94.6	95	1st	3d	2	0	1.0	.25
15	95	80	15	89.6	90	1st	10th	9	3	3.0	1.33

It is not difficult to select the better of these two compositions. No reader felt that composition No. 10 was lower than 90% in grade, or than 3d in rank, whereas No. 15 was graded as low as 80%, and ranked as low as 10th among the twenty-five compositions. The extreme variations are therefore, greater in the case of composition No. 15. Obviously No. 10 was considered by the readers to be more nearly the best composition, hence it is selected as the "A" grade or 95% composition in the scale. No. 15 is too good a composition to be considered for the next composition in the scale, hence it has to be dropped from further consideration.

"B" GRADE OR 85% COMPOSITION

Standard Requirements:

Mean or Average Grade.....	85%
Median Grade.....	85%
Median Rank.....	5.8

From the table below, one sees at once that, judged by these statistical items, several of these compositions are not really competitors for the second place in the scale. Nos. 1 and 2 are too poor, i. e., they are graded and ranked too low. No. 4 has in its favor the mean and median grades of 84.3% and 85.5% respectively, but it has a wide extreme variation in both grade and rank. Also, its median rank is only 4.5, whereas our require-

<sup>1</sup> Selected for composition No. 1 in the scale.

TABLE VIII

## EXPLANATION

Letters in the following table designate the following topics:—

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75 % of the central cases; (k) The median rank, and (l) The average deviation.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>
1	95	68	27	81.9	83.0	2d	13th	11	8	7.5	3.17
2	90	64	26	80.0	80.0	5th	15th	10	4	7.0	2.17
4	94	63	31	84.3	85.5	2d	16th	14	6	4.5	2.83
8	95	52	43	82.3	85.0	1st	16th	15	10	6.0	4.04
13 <sup>1</sup>	95	71	24	83.7	85.0	1st	12th	11	7	6.0	2.50
17	93	63	30	81.0	81.5	3d	14th	11	7	8.0	2.58
19	92	60	32	79.6	80.0	2d	19th	17	8	9.0	3.25
20	92	70	22	82.7	85.0	2d	16th	14	7	6.0	3.00

ments call for a median rank of 5.8. No. 8 is one of those compositions on which teachers cannot agree. Its extreme variation puts it beyond our further consideration here. Comparatively, No. 13 has not a wide variation in grade or rank, and it has a mean and median grade of 83.7 and 85.0 respectively. It is clear that this composition is a strong competitor for the second place. No. 17 has a wider variation than No. 13, and its mean and medians indicate that it is too poor for an 85 % composition. No. 19 is likewise too poor. No. 20 has a narrow extreme variation, its mean is a little low, but its median is perfect. Its extreme variation by rank is comparatively wide, while its median rank is satisfactory. Clearly the selection of an 85 % composition for this scale must be made between Nos. 13 and 20. We select No. 13 because (a) of its slightly narrower extreme variation by grade, because (b) of its mean of 83.7 which is 1 % nearer the standard than the mean of No. 20, because (c) its extreme variation in rank is three points narrower than that of No. 20 and because, (d) in other respects it is as good as No. 20.

<sup>1</sup> Selected for Composition No. 2 in the scale.

## "C" GRADE OR 75% COMPOSITION

## Standard Requirements:

Mean or Average Grade.....	75%
Median Grade.....	75%
Median Rank.....	10.6

TABLE IX

## EXPLANATION

Letters in the following table designate the following topics:—

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75% of the central cases; (k) The median rank, and (l) The average deviation.

a	b	c	d	e	f	g	h	i	j	k	l
16	92	68	24	78.2	78.5	3d	17th	14	7	9.5	3.25
18	90	60	30	79.9	75.0	2d	19th	17	8	9.5	2.46
21 <sup>1</sup>	89	54	35	76.1	77.0	6th	19th	13	6	11.0	2.38

Obviously compositions Nos. 16 and 18 are too good compositions for typical 75% grade compositions. The mean or average grade of the former is 78.2 and that of the latter is 79.9. In rank likewise they are better than No. 21 and too good for our purpose. That leaves only No. 21 to be selected for the C grade or 75% composition. Even though this is the best selection that can be made under the circumstances, one could wish that the extreme variations were less and that the other statistical items were nearer the standard requirements.

## "D" GRADE OR 65% COMPOSITION

## Standard Requirements:

Mean or Average Grade.....	65%
Median Grade.....	65%
Median Rank.....	15.4

<sup>1</sup> Selected for Composition No. 3 in the scale.

TABLE X  
EXPLANATION

Letters in the following table designate the following topics:—

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75 % of the most central cases; (k) The median rank, and (l) The average deviation.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>
5	78	50	28	61.1	60.0	14th	21st	7	5	17.0	1.46
6	88	50	38	69.4	69.5	8th	20th	12	6	14.0	2.0
7	80	40	40	63.5	65.0	10th	24th	14	7	16.5	2.67
12	75	42	33	59.9	60.0	14th	23d	9	4	17.0	1.71
22 <sup>1</sup>	86	47	39	66.6	66.5	8th	21st	13	7	15.0	2.46

Clearly Nos. 5 and 12 are too poor for a typical 65 % composition. No. 7 has a wide extreme variation in both grade and rank: although its mean and median grades might do, its median rank is too low. Hence No. 22 is selected, even though its mean and median grades are slightly high to meet the standard requirements.

#### "E" GRADE OR 55 % COMPOSITION

##### Standard Requirements:

Mean or Average Grade.....	55 %
Median Grade.....	55 %
Median Rank.....	20.2

TABLE XI  
EXPLANATION

Letters in the following table designate the following topics:—

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75 % of the most central cases; (k) The median rank, and (l) The average deviation.

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	<i>k</i>	<i>l</i>
9	75	40	35	56.1	58.5	14th	23d	9	4	20.0	1.58
14	76	40	36	55.4	53.5	9th	24th	15	6	19.5	2.75
23 <sup>2</sup>	74	40	34	55.4	57.5	14th	23d	9	4	19.5	2.00

<sup>1</sup> Selected for Composition No. 4 in the scale.

<sup>2</sup> Selected as Composition No. 5 in the scale.

In considering No. 9 it is clear that it is a little too good for a typical 55 % composition, as shown in two of the three items of the standard requirements. The item of median rank is perfect. However, it should be pointed out that the median rank of the composition selected to occupy a place immediately preceding this was 15.0 instead of the standard requirement of 15.4. Hence, the median rank of composition 55 % in the scale should be slightly under 20.0 rather than over it. Between Nos. 14 and 23 the advantage of No. 23 is in the narrower extreme variation by rank and in the slightly higher median grade. Hence, No. 23 is selected.

" F " GRADE OR 45 % COMPOSITION

Standard Requirements:

Mean or Average Grade.....	45 %
Median Grade.....	45 %
Median Rank.....	25.0

TABLE XII

EXPLANATION

Letters in the following table designate the following topics: —

(a) The number of the composition; (b) The highest grade given it; (c) The lowest grade given it; (d) The maximum variation in grade; (e) The mean or average grade; (f) The median grade; (g) The highest rank given it; (h) The lowest rank given it; (i) The maximum variation in rank; (j) The maximum variation in rank of 75 % of the most central cases; (k) The median rank, and (l) The average deviation.

a	b	c	d	e	f	g	h	i	j	k	l
3	50	30	20	42.7	41.0	21st	25th	4	2	25.0	.71
11	65	40	25	49.5	49.5	16th	25th	9	5	22.0	2.08
24	73	30	42	48.9	48.0	17th	25th	8	4	22.0	1.38
25 <sup>1</sup>	62	20	42	44.9	45.0	19th	25th	6	3	23.5	1.29

The objection to No. 3 is that, although all agree that it is 25th composition in rank, or the poorest in the series, the grades given it indicate that it is too poor. On the other hand, No. 11 is too good. The choice then lies between Nos. 24 and 25. It is clear that No. 25 more nearly meets the standard requirements. No. 24 is a little too good. It should be pointed out that the median

<sup>1</sup> Selected as Composition No. 6 in the scale.



rank of composition No. 25 is really more satisfactory than at first appears. The median rank of the 55% composition was 19.5, a little higher than the standard requirements: if to this is added 4.8, the difference in points of rank between compositions, we have 24.3, a little less than the standard requirements indicate. Hence, No. 25 is selected for the sixth and last composition in the scale.

### SUMMARY

The following table shows at a glance how the statistical items pertaining to each composition selected for the scale,<sup>1</sup> compare with the standard requirements established for each composition.

Compositions of the Scale	No. of Composition Selected	Standard Mean or Average Grade	Mean Grade of Composition Selected	Standard Median Grade	Median Grade of Composition Selected	Standard Median Rank	Median Rank of Composition Selected
A grade or 95 % . . . . .	10	95	94.6	95	95.0	1.0	1.0
B " " 85 % . . . . .	13	85	83.5	85	85.0	5.8	6.0
C " " 75 % . . . . .	21	75	76.1	75	77.0	10.6	11.0
D " " 65 % . . . . .	22	65	66.6	65	66.5	15.4	15.0
E " " 55 % . . . . .	23	55	55.4	55	57.5	20.2	19.5
F " " 45 % . . . . .	25	45	44.9	45	45.0	25.0	23.5

The chart on page 46 indicates the distribution of ranks for each of the six compositions constituting the description scale. The median is indicated by the line dividing the distribution. For an explanation of this chart see pages 32 and 33.

### DEFINING THE MERITS AND DEFECTS OF THE COMPOSITIONS IN THE SCALES

After the scales had been selected, the next step was to define the merits and defects of each composition in each scale. This was done by a committee consisting of high school and elementary school teachers with the coöperation of the teachers and principals who had originally read the compositions.

<sup>1</sup> For the Compositions of the scale, see pp. 49-57.

[illegible]

The six compositions of the description scale formed the basis of a teachers' meeting, consisting of eighth grade teachers, elementary school principals, and high school teachers of English. In preparation for the meeting each person was asked to define, in a succinct paragraph, the merits and defects of one of the six compositions in the scale. This assignment had two results: first, it prepared the teachers to participate in the discussion, and second, it furnished five or six paragraphs from as many different people setting forth the merits and defects of each composition as each reader saw them. In further preparation, two persons were asked to lead the discussion on each composition. With this preliminary preparation, the meeting proved exceptionally interesting and profitable to the teachers. It was interesting because it "moved," and it was profitable because it was devoted to the consideration of some practical everyday school matters on which every teacher was glad to obtain suggestions.

At the close of the meeting the written paragraphs mentioned above, were collected and turned over to the committee which was to prepare the necessary paragraphs. The preparation of these paragraphs was not considered an easy task and the committee did its work conscientiously and with thoroughness. After tentative paragraphs had been prepared by each member of the committee according to agreement the committee held a meeting to consider them. Besides the five members of the committee Superintendent Spaulding, Professor Holmes of Harvard, and the Joseph Lee Fellow attended the meeting. The paragraphs were read and discussed at length. It was agreed that the paragraph accompanying each composition should state, in general, why each composition was better than the one below it in the scale: why it was poorer than the one above it in the scale, and also its own intrinsic worth. With the suggestions from the discussion of the committee, the committee revised the paragraphs and prepared the final definition of merits and defects as they are found accompanying each composition in the description scale.

Through the courtesy of Mr. Charles S. Thomas, Head of the Department of English in the Classical High School, Newton, and

Editor of the English Leaflets of the New England Association of Teachers of English, the Description Scale and the accompanying paragraphs were published in the February issue of the Leaflet with the request that members of the association offer suggestions for improving them before final publication.

The same general procedure was followed in Exposition, Argumentation, and Narration, except that the teachers were divided into two groups, and each group considered two of the above types. In the case of these scales, also, the final paragraphs were not prepared in time to be presented in the English Teachers Leaflet to obtain the criticism of the members of the association.

## THE COMPLETED DESCRIPTION SCALE

No. 1. "A" GRADE COMPOSITION. VALUE, 94.6%

A STORM IN A FISHING VILLAGE<sup>1</sup>

It was a cold damp day in November. The sky was a heavy leaden color. In the east a black line stretched across it foretelling the coming of a storm. The houses across the way were dismal shadows, — flat, cold, heartless. A piercing chill penetrated to the bone. The rattle of a grocer's cart or the clatter of a horse's hoofs, seemed cold. The pedestrians were all clothed in black, or else the feeble light made them seem so, and they were cold — everything was cold, cold, cold. An awful loneliness pervaded all. 5

The black line in the east had grown into a cloud and was coming nearer, nearer, over the sea. Suddenly a gust of wind shook the very foundations of the houses, — another, and then a continuous blowing. The howling was horrible. Great sheets of foam were blown into the streets, — here and there a piece of wreckage hurled itself against a cottage. Fishermen's wives hurried down the narrow streets to the shore, straining their eyes for any sign of a wreck. Old seamen looked at the roaring sea and shook their heads. 10 15

By this time the black cloud had engulfed the sky. The day was like night, although it was not yet noon. Boys ran about with torches which were immediately extinguished, and the roaring called to mind the last day at Pompeii. 20

Rain had begun to descend. At first only drops fell on the hardened faces of old mariners, and on the pale countenances of wives, mingling with the drops already there. But soon great sheets fell, forcing the people indoors, to the poor shelter afforded by the groaning houses. 25

For about an hour the storm continued thus, then by degrees the wind lessened, though the rain still fell, and the ocean thundered. But soon the rain also slowly stopped and 30

<sup>1</sup> Composition No. 10 in the complete set.

the roaring ceased. The black cloud rolled slowly away, leaving the tardy sun to shine on the drenched town and the great piles of wreckage on the shore.

### *Merits*

This theme ranks high because the writer has a clear picture of the scene and has used words and phrases that bring the details of this picture clearly before the reader. There are good color images in such expressions as *leaden, a black line, great sheets of foam, the day was like night, and the sun shining on the drenched town*. Sound effects are strikingly brought out by such phrases as *the rattle of a grocer's cart, the howling, the wreckage hurled against the cottage, the roaring sea, and the thundering ocean*. The sensation of dreariness and chill is conveyed by the repetition of the word *cold*. The confusion caused by the storm is reflected in the anxious look of the wives of the fishermen. A further human touch is added in the mention of such details as *the extinguished torches carried by the boys and the drops of rain falling upon the hardened faces of the old mariners*. All these enumerations fittingly combine to produce a tone of coldness, desolation, and anxiety. The details are told in their natural sequences. This chronological arrangement has helped the writer to keep safely to his main point and effectively connect the details with each other.

### *Defects*

The repetition of the word *cold*, while effective in bringing out the sensation, is somewhat artificial. *Loneliness* (line 9), is misspelled; a semicolon should supplant the comma in line 8. Omit the comma in line 6.

### *Comparison*

The theme is superior to No. 2 in its richness of imagery, its wealth of details, its depth of feeling, its maturity of style (seen in the sentence-structure and the vocabulary), and in its mastery of mechanical forms.

No. 2. "B" GRADE COMPOSITION. VALUE, 83.5%

GRANDMOTHER <sup>1</sup>

In front of the open fireplace in a large armchair there sits our old Granny. She is old and feeble. Her hair is snow-white and over her head a little white cap is carefully tied. Her face is full of wrinkles and her keen blue eyes sparkle through a pair of glasses which she has on her nose.

5

She has a shawl thrown over her shoulders and she also wears a thick black skirt. On her feet can be seen a pair of soft slippers which she prizes very much because they were given her for a Christmas present.

As you know Grannies always like to be busy our Granny is busy knitting gloves. Her hands go to and fro. She will keep on working until her knitting is done. Now that it is done she carefully folds her work and packs it into her work-basket. Then she trots upstairs to bed and oh, how lonesome it is when our dear Granny is gone from the room.

15

*Merits*

The merits of this composition are: (1) the clear and pleasing impression obtained; (2) the happy choice of details and the logical sequence of their arrangement; (3) the sympathetic treatment of the subject — for example, bits of sentiment seen in the grandmother's attachment to the slippers, and the loneliness felt when she goes to her room; (4) the interesting introductory sentence; and (5) the mechanical accuracy.

*Defects*

The defects are: (1) the rather monotonous sentence structure, and (2) the childish vocabulary.

*Comparison*

To justify its place in the scale, note: (1) that in No. 1 there is successfully treated a much more difficult subject; (2) there is a greater power of imagination; and (3) there is a greater variety of sentence structure and a richer vocabulary.

<sup>1</sup> Composition No. 13 in the complete set.

## No. 3. "C" GRADE COMPOSITION. VALUE, 76.1%

A MANSION<sup>1</sup>

As you look across the road you will first see a long private avenue or walk.

It is in the summer, and on each side of this long walk are some beautiful, stately elms. They are hundreds of years  
5 old and they have done their duty for as many years, shading the walk from the noon sun.

Cross the road and you will see if you look up the avenue, a beautiful mansion. It is a colonial house and four large pillars are upholding the roof. A piazza runs along three sides  
10 of the house.

Near the house is a tennis court where for years the occupants of the mansion have passed many an hour.

Let us enter the mansion. It is a beautiful cool place, although dark. As we enter we see large psalms on each side of  
15 the entrance. On the floors are old oriental rugs which have been handed down for generations. In the parlor is a harp, and on the walls are the portraits of the ancestors. In all, it is a beautiful place.

*Merits*

The writer of this theme has presented a clear though conventional picture. Although he changes his point of view several times, he has attempted to put his readers into the best positions to see the mansion. The choice of words is fair. Such details as the *stately elms*, the *oriental rugs*, the *harp*, and the *portraits* are well selected. Only one mistake in spelling occurs (line 14).

*Defects*

There are, however, too many paragraphs for such a short theme. Constant repetition of the pronoun *you*, and of the words *beautiful* and *mansion* give an impression of monotony and of limited vocabulary. The pupil has evidently a definite place in mind, but has not suggested the spirit of the scene, as has the writer of No. 2.

<sup>1</sup> Composition No. 21 in the complete set.



*Comparison*

The composition deserves its place in the scale above No. 4 because of better sentence structure and more orderly arrangement. It is inferior to No. 2 on account of its somewhat prosaic tone and its constantly changing point of view.

## No. 4. "D" GRADE COMPOSITION. VALUE, 66.6%

THE LAKE AT SUNRISE<sup>1</sup>

In the Mountains of Pennsylvania there is a lake.

On one side of the lake is a boat landing, at which a dozen or more boats are tied up. On this boat landing one may stand and look up the lake, at sunrise, and see the sun peering up over the top of the mountains and shining on the water. Then a King Fisher flies down the lake making his cheerful noise, instantly, all the other birds begin to chirp as if their life depended on it.

Looking across the lake one would see numerous wells and coves backed up by woods from which comes the chirp of the birds. Hearing the explosions of cylinders we look to see where in comes from and find a pumphouse that keeps the lake supplied with water.

Looking down the lake over the dam to the ice house with the roof sparkling with. On the roof of the house a hawk is sitting adding his clear whistle to noise of other birds.

Looking around to the woods, at our back, with an old oil well in front of them. The birds flying from the woods in flocks, and far away from the hills comes the sound of the of Italians singing.

*Merits*

The writer has seen and heard concrete details and has re-created his images clearly. He has tried, too, to make his point of view obvious to the reader. His vocabulary is adequate.

*Defects*

As a description the composition fails because there is no unified picture of the lake. The selected details, clear in themselves, tend to distract rather than center the interest. There are numerous mechanical errors: there should be no commas after *lake* or *sunrise* (line 4); *shining* (line 5) is misspelled; there should be a period after *noise* (line 7), and no comma after *instantly* (line 7), which should commence with a capital; *in* (line 12)

<sup>1</sup> Composition No. 22 in the complete set.

is not correct; the groups of words in (lines 14, 15), and (lines 17, 18) do not make sentences; the word *the* is omitted before *noise* (line 16) and the word *are* before *flying* (line 18).

### *Comparison*

The theme merits its rank in the scale by superiority in spelling, paragraphing, and maturity of thought. It does not, on the other hand, show equal mastery in the fine details, the discriminating vocabulary, and in the ability to stick to the point. The sentence-sense is faulty.

## No. 5. "E" GRADE COMPOSITION. VALUE, 55.4%

A LIGHT HOUSE <sup>1</sup>

A description of a light house is quite interesting.

First a light house is generally situated on a mass of rocks in the ocean or on some great lake. And then to get into a light house is a question. Some times you have to climb to  
 5 the top on a steal ladder, and again you only have to go half way up and you find sort of a steal porch which is very strong with a door in the side of the light house. On the very top of the light there is generally two or three life boats in case of accidents. In side there is an enormous light which flashes  
 10 every two minutes and sometimes more often it depends holy on the weather. The man himself has very favorable sleeping quarter and food it is a very lonely life except when you have a man with you. Sometimes they play cards all day long until it is time to fix the lights and then they are very  
 15 busy.

*Merits*

The merits of this theme are: (1) the evident spirit of faithful accuracy; and (2) a successful use of certain simple words, — such as *mass of rocks*, *enormous light*, and *lonely life*.

*Defects*

Many obvious defects warrant its low position in the scale. The pupil was asked to write a description. After announcing his purpose to do this, he writes an exposition, or explanation of lighthouses in general. The first sentence of the theme is worthless, contributing nothing toward the development of the subject. It should be omitted. The paragraph is full of misspelled words and grammatical slips; *steal*, *in side*, *holy*, *some times*, *sleeping quarter*. The most striking weakness of the work is the loose and rambling form of the sentences, indicating indefinite thought. "Run-on" sentences, are found in lines 9-13. No attempt has been made to establish a point of view. On this account, and because of a lack of vivid words, the passage is dead and colorless.

*Comparison*

The composition is placed above No. 6 because it contains fewer mechanical errors.

<sup>1</sup> Composition No. 23 in the complete set.

## No. 6. "F" GRADE COMPOSITION. VALUE, 44.9%

A SCENE ON THE PRAIRIES <sup>1</sup>

Along a large plain in the west with mountains on all sides. The sun was just sinking behind the mountains. Some trappers were on the plain just about to get their supper. They had one tend because there was just three of them. Beside their tent tripled a little spring. After the three trappers had eating there supper they sat down by the fire because it had growing dark. All of a sudden a bunch of Indain's came riding up. When they came near they fired of their guns and disappered in the darkness and the trappers turned into camp leaving one a the trappers on gaurd.

*Merits*

The commendable features of this composition are directness, simplicity, and a logical arrangement of details. The writer passes from the general to the specific in a natural manner. In spite of a change in the point of view in the last two sentences, the paragraph, as a whole, makes a clear picture.

*Defects*

Blunders in grammar and in spelling, lack of sentence-sense, and short, childish sentences make the rating of the composition necessarily very low. Such errors as *tend* for *tent*, *tripled* for *trickled*, *eating* for *eaten*, *growing* for *grown*, and the misspelling of *Indians* indicate either hasty, careless work, or slovenly habits of enunciation.

*Comparison*

Compared with the descriptions of the storm and of grandmother, the short sentences here show immaturity and weakness rather than skill or force. With a large amount of correcting of mechanical details, but with very little revising as a whole, this composition would be superior to No. 5.

<sup>1</sup> Composition No. 25 in the complete set.

## EFFECT OF USING THE SCALE

An initial experiment in the use of the description scale was made in Arlington and Boston. Eighth grade teachers and elementary school principals in these two cities graded a set of twenty-five eighth grade compositions secured for this purpose, both without the use of the scale and with it. With the use of the scale the results showed a reduction in the extreme variation of judgments; that is, no two teachers were quite so widely divergent as before. The average variation was also less. But in this matter neither the average nor the extreme variation is the most important consideration. Far more important is the effect which the use of the scale has on the grading of each individual teacher. To ascertain this is obviously a complicated matter, and it requires more time than has been thus far at our disposal. This phase of the problem will be the subject of further investigation.

## THE EXPOSITION SCALE

In the preceding pages we have analyzed in detail the basis and the methods of selecting the description scale. In the case of the exposition scale, and the two others which follow, only the two fundamental tables and the completed scales are given. The tables give facts similar to those given in the case of description. The method of selecting the scales on the basis of these facts is the same as in description.

THE TABULATION OF RESULTS OF READINGS<sup>1</sup>

Table I shows the grade that each of the twenty-four readers gave each of the twenty-five compositions in exposition.

TABLE I

No. of Reader	Number of the Composition																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	88	60	65	60	70	55	70	50	80	50	40	95	75	80	85	80	75	75	60	75	80	75	90	85	75
2	95	70	72	51	78	50	89	54	68	53	45	59	55	80	58	73	74	87	52	85	84	60	76	92	83
3	90	40	65	42	80	40	75	35	78	45	35	95	44	73	46	68	40	70	35	75	82	38	90	75	50
4	90	30	60	..	60	30	75	55	80	50	20	95	25	75	55	80	77	75	65	55	90	25	90	45	85
5	90	65	70	45	85	75	85	55	80	60	45	85	55	75	55	75	70	85	70	90	95	50	80	90	90
6	95	65	88	55	65	65	70	65	78	66	45	90	48	83	60	88	75	85	68	73	80	50	88	75	88
7	95	70	70	55	78	67	80	60	60	58	30	80	45	75	88	74	78	81	60	78	82	55	64	85	73
8	80	50	65	50	75	65	80	50	70	50	40	95	65	80	70	75	75	65	50	80	80	65	75	65	70
9	90	62	55	45	67	67	70	60	85	50	40	87	47	87	87	72	80	90	53	75	93	65	77	95	83
10	93	69	80	53	75	65	90	62	70	60	45	95	45	84	89	80	75	71	45	79	80	50	89	70	82
11	87	60	76	50	76	73	83	63	82	58	45	95	55	75	60	85	75	78	65	85	83	63	80	77	82
12	90	45	70	50	70	55	75	60	70	65	45	95	45	85	65	75	60	90	55	60	80	55	85	95	70
17	94	52	75	48	75	50	83	45	92	55	30	95	50	90	60	90	65	93	60	70	93	55	92	70	92
18	85	48	75	55	73	63	66	53	81	56	45	95	61	78	65	90	83	76	58	86	88	52	94	68	71
19	90	64	70	55	72	66	77	56	84	60	45	95	50	88	75	84	73	82	68	78	86	58	92	74	76
20	95	55	48	42	85	56	60	48	56	48	40	90	44	48	65	65	75	68	50	70	70	55	50	60	55
21	86	62	72	53	70	66	84	60	82	61	47	95	45	88	57	73	69	77	68	65	80	50	89	75	71
23	77	67	76	60	78	70	71	50	85	54	45	95	57	69	66	79	74	73	62	72	86	64	92	75	82
24	85	54	61	41	64	50	70	41	86	40	40	95	48	90	55	75	74	70	57	60	73	55	85	68	71
A	75	85	55	55	95	65	55	55	75	65	55	95	65	75	95	75	65	85	55	55	85	65	85	85	95
B	65	55	68	55	70	67	76	55	70	58	40	55	45	80	50	65	75	68	68	90	95	55	75	85	77
C	95	55	60	50	85	60	80	40	60	60	35	90	45	70	80	65	80	85	40	50	85	40	65	75	70
D	95	65	60	30	95	90	90	45	70	70	20	85	50	65	80	70	85	95	35	45	95	40	65	75	70
E	95	45	54	51	80	62	75	52	84	49	25	69	40	90	58	73	61	88	60	70	77	48	86	65	70
F	75	65	65	45	70	60	85	60	75	50	45	80	55	70	45	70	60	80	75	75	95	65	90	85	90
G	80	63	62	48	64	55	60	38	66	36	30	95	35	86	58	70	65	75	40	68	78	45	90	73	67

<sup>1</sup> Mr. J. L. Manahan and Mr. Roy Davis did the statistical work on the Exposition Scale.

Table IV shows the ranking of each composition in exposition by each reader.

TABLE IV<sup>1</sup>

No. of Reader	Choice in Rank																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	12	23	1	24	15	9	16	21	14	20	17	18	13	22	25	5	7	2	4	19	3	6	8	10	11
2	1	24	7	18	20	21	25	14	5	23	17	16	3	2	9	22	12	15	13	8	10	19	4	6	11
3	12	23	1	21	5	9	7	24	20	14	18	16	3	25	15	10	13	4	17	6	2	22	19	8	11
4	1	12	21	23	25	9	16	17	7	18	14	19	3	5	20	8	15	10	24	6	2	13	22	11	4 <sup>2</sup>
5	21	25	24	20	1	7	12	18	5	23	9	14	6	16	3	17	19	2	10	8	15	13	22	4	11
6	1	12	3	16	23	25	18	14	21	9	24	17	20	7	19	10	2	6	5	8	15	4	22	13	11
7	1	15	24	21	18	12	7	5	20	17	14	16	25	3	2	6	23	8	19	9	10	22	4	13	11
8	12	20	14	1	7	21	23	17	16	5	15	25	9	24	18	3	13	6	22	2	4	8	19	10	11
9	24	21	18	1	14	12	15	9	25	17	23	20	16	7	5	6	22	2	8	3	19	10	13	4	11
10	12	1	7	15	23	14	25	3	21	16	20	5	17	18	24	9	2	6	8	10	4	22	19	13	11
11	12	1	20	16	21	7	9	25	23	18	24	3	5	17	14	6	19	22	8	2	15	10	13	4	11
12	24	12	1	18	14	23	21	7	16	9	25	5	3	10	15	20	17	8	22	6	19	4	2	11	13
17	12	1	18	21	25	23	9	16	14	7	3	5	24	20	17	15	19	10	22	2	13	6	4	8	11
18	12	23	16	21	20	1	17	9	14	18	3	5	25	24	7	15	6	13	19	10	4	8	22	2	11
19	12	23	1	14	21	9	16	18	20	7	25	15	24	17	5	3	19	6	2	10	22	8	4	13	11
20	1	12	5	17	20	21	18	15	16	7	24	9	6	25	22	2	19	23	3	8	14	10	13	4	11
21	12	23	14	1	7	9	21	18	24	16	3	25	5	17	19	6	20	2	10	8	15	4	22	11	13
23	12	23	21	9	25	16	5	1	3	24	17	18	20	7	6	14	2	15	22	19	4	13	10	8	11
24	12	14	9	23	1	16	17	21	25	7	18	24	5	3	20	19	15	22	2	6	13	4	8	10	11
A	5	15	25	12	24	21	18	2	23	14	1	16	9	6	10	22	17	13	20	7	3	19	8	11	4
B	21	20	24	14	25	7	17	23	5	9	3	18	19	6	1	16	10	2	4	8	12	22	15	13	11
C	1	12	21	5	18	15	7	17	24	14	25	23	16	9	10	6	3	2	20	4	22	13	8	19	11
D	1	5	18	21	6	7	12	17	23	15	9	10	16	22	25	2	14	3	13	8	20	24	19	4	11
E	1	14	18	23	9	5	21	7	16	25	20	12	24	6	17	19	15	3	8	4	10	22	2	13	11
F	21	25	23	24	7	12	18	1	9	20	19	16	14	5	22	3	2	17	6	8	13	10	4	11	15
G	12	23	14	1	21	18	24	16	20	25	9	17	5	2	3	7	15	6	4	22	19	8	10	13	11

<sup>1</sup> Numbered thus to correspond to the tables for the description set.

<sup>2</sup> No. 4 cast out by one reader.



## THE COMPLETED EXPOSITION SCALE

No. 1. "A" GRADE COMPOSITION. VALUE, 91.8%<sup>1</sup>EXPLANATION OF STANDARD TIME <sup>2</sup>

Standard Time is used in the United States to avoid great differences in time between cities. In travelling from our eastern to our western coast one would find on arriving that his watch was three hours too fast. The cause for this is that the sun's rays strike the Atlantic coast three hours sooner than they do the Pacific coast. 5

Formerly each city had its own sun time or Local Time which was a great inconvenience to travellers and more so when railroads were established.

This trouble has been wholly avoided by dividing our country into time belts. There are five consecutive belts which bear names that refer to the land which they cover. 10

The belt which is farthest east is called the Colonial Time belt. The belt which includes New England and New York is named the Eastern Time belt while the belt that passes through the midst of our country is named the Central Time belt. The remaining two are the Mountain and Pacific Time belts; the Mountain Time belt is centered around the Rocky Mountains while the Pacific Time belt includes our western coast. 15 20

There are three hundred and sixty degrees which the sun has to cover in one day or twenty-four hours, therefore the sun overspreads fifteen degrees in one hour; for that reason the distance between each belt is fifteen degrees.

The Eastern Time belt starts on the 15th meridian, the Central on the 90th meridian, the Mountain Time belt commences on the 105th meridian while the Pacific Time belt 25

<sup>1</sup> In finding this average value, the three lowest grades which were obviously extreme, were disregarded. Readers who gave these low grades did so because of the confusion in statements of fact in the theme.

<sup>2</sup> Composition No. 12 in the complete set.

begins on the 120th meridian. Now when one goes from our eastern to our western coast he has to set his watch back one  
30 hour at every fifteenth meridian.

### *Merits*

The merits of this theme are: (1) an orderly and well-arranged presentation of facts. The writer defines his subject in the first paragraph; then he selects the necessary details and places them in a logical order; (2) a mature use of connective words and easy transitions between paragraphs; (3) a marked variety of sentence structure; (4) a careful choice of words to avoid repetition, as in paragraph 4, *is named, is centered around, includes* (lines 17-20), and in the last paragraph, *start, commence, begin*; (5) an almost complete absence of serious mechanical errors.

### *Defects*

There should be two or three paragraphs instead of six. An element of confusion has been introduced by mentioning the Colonial Time Belt, and there are one or two obvious misstatements of fact. In the fifth paragraph a semicolon should stand after *twenty-four hours*, (line 22) and a period after *one hour* (line 23).

### *Comparison*

This composition is superior to No. 2 in its greater maturity and variety of expression, and in its efficient handling of a more difficult subject.

## No. 2. "B" GRADE COMPOSITION. VALUE, 82.0%

HOW TO MAKE FUDGE <sup>1</sup>

A very common and well liked home made candy is Fudge. It is very easily and quickly made.

To make it, put two cup-fulls of sugar, four teaspoonfulls of cocoa, a piece of butter about the size of a walnut, and three-fourths of a cup of milk into a small kettle.

5

Place this on the stove to boil until, when a small amount of it is dropped in a glass of cold water it will form a ball. Stir it while it is boiling.

As soon as it will form a ball in water take it from the stove and add two teaspoonfulls of vanilla. A cupful of 10 ground English walnuts or cocoanut may be added, also, if desired.

Then pour it into well buttered tins and let it cool before cutting it into pieces. Cut the pieces about an inch square.

If these rules are followed accurately the candy will harden 15 and be very good.

*Merits*

The writer of this theme evidently knows how to make fudge and has stated the method simply and clearly. The words are well chosen and the sentence structure good. Evidence of a plan is shown in the introduction and conclusion, as also in the logical arrangement of details.

*Defects*

The words *cupfuls* and *teaspoonfuls* are misspelled; there is a shifting of mood from indicative to imperative; the theme should be in one paragraph.

*Comparison*

This theme is not so good as No. 1 because of its poor sentence structure and lack of excellence of style. It is better than No. 3 because it is a clearer exposition.

<sup>1</sup> Composition No. 23 in the complete set.

## No. 3. "C" GRADE COMPOSITION. VALUE, 71.4%

HOW TO GIVE A DINNERPARTY<sup>1</sup>

After you have sent out invitations for your dinner the arrangement of the table is the first thing to decide. The center piece may be flowers or anything desired.

After that has been decided upon, the courses are the next  
5 thing to decide upon. It depends on the courses what silver and china are used. Always the knives are placed on the right with the spoons, which are arranged in the order of which you use them the first one being nearest the plate. The forks are at the left of the plate in the same order as the  
10 spoons. The glasses are at the right above the knife. The napkins are at the left beside the forks. The maid serves the person left of the hostess first.

When the dinner is ready the guests assemble, but before entering the dining-room the men draw from a box or hat,  
15 which contains the names of the ladies present, one of the names, the one he draws he escorts into dinner he seats her first then sits at her left.

*Merits*

This theme, with the exception of one or two sentences, is arranged in an orderly fashion, and leaves a clear impression on the reader's mind. There is a fair knowledge of paragraph structure. The spelling is accurate.

*Defects*

There are, however, numerous faults. Only the third paragraph pertains to the title of the composition: the first and second tell how to prepare for a dinner party. There is room for improvement in paragraph structure: paragraphs one and two should be combined. The first sentence in the second paragraph should be subordinated, and the last sentence does not pertain to the master idea of the paragraph. The use of short sentences is monotonous. There are two "run-on" sentences in the last paragraph. The repetition of the words *decide upon* is unpleasant. The use of pronouns is lax: *you* is used for *one* in lines 1 and 8; and *one* is used ambiguously in line 16. Commas are omitted in lines 1 and 8. The expression *anything desired* is vague, and the expression *always the knives* is awkward.

<sup>1</sup> Composition No. 17 in the complete set.

*Comparison*

The theme is ranked higher than No. 4 because it is more coherent, and the sentence structure is better. Because the sentence structure is more monotonous, and because it is not so well punctuated, the theme is placed lower than No. 2.

## No. 4. "D" GRADE COMPOSITION. VALUE, 61.0%

HOW TO BUILD A FIRE <sup>1</sup>

To build a furnace fire you must as the following instructs. First, you must rake down and take out all the cinders, clinkers and ashes, sift them, so as to do away with clinkers and ashes and use the cinders for some other purpose.

- 5 The next step, is to get your material ready to work with. First you put some paper in the furnace, on that some wood, wait until the wood is blazing, then take three good-sized shovels full of small coal and put it on that. Take the same amount of big coal repeating the same process. A fire like  
10 this is supposed to last eight hours. The next thing to do is to open all your drafts to let the air in and all the gas and smoke out so as the fire will progress quicker. Last of all investigate your work to see if it is allright. Your task is done.

*Merits*

This theme shows clear thinking and a mastery of the details that make the whole convincing. The writer has evidently built furnace fires and relives the process as he writes. His vocabulary is thoroughly suited to his theme.

*Defects*

The writer has shown no care in revising his theme. There is an obvious omission in the first line, careless sentence structure in the second paragraph, and a misspelling of *all right* in the last line. The sentence commencing *A fire like this* is an intrusion — an offense against coherence. The last sentence may be omitted.

*Comparison*

This theme is thinner in subject-matter than No. 3 and is more obviously lacking in a sense of style and form. A firm grasp of the elementary principles of composition secures its place above No. 5.

<sup>1</sup> Composition No. 6 in the complete set.

## No. 5. "E" GRADE COMPOSITION. VALUE, 52.6%

HOW TO HARNESS A HORSE <sup>1</sup>

When you get the horse out of his stall, the first thing to do is to get the bridal on him. On putting the bridal on you first take hold of the piece of the bridal that goes around his neck and then take hold of the bit in the other hand. You then take hold of the lower part of his mouth and pull it 5 down and then slip the bit in his mouth. The bit is the iron piece on the bridal. When you get the bit in his mouth you tie the strap around his neck. Then take the collar and put it over his head on to his neck. The last thing to do is to put the saddle on, throw the saddle over back and buckle the 10 inside strap on the to the other side of the saddle, you put it under his stomach to buckle it and you have to have it good and tight.

*Merits*

The merits are three in number: (1) the writer knew how to harness a horse; (2) he has given his directions in an orderly manner; (3) he has kept to his subject — has omitted all unnecessary details.

*Defects*

The defects are as follows: (1) the ideas are crudely and awkwardly expressed; (2) the vocabulary is meagre, as shown for example, by the frequent repetition of *bridle* and *saddle*; (3) *bridle* and *stomach* are misspelled; and (4) the last sentence is ungrammatical and crude — it should be recast.

*Comparison*

This theme precedes No. 6 in the scale because it is superior in sentence structure, spelling, and clearness. It is inferior to No. 4 in vocabulary and mechanics.

<sup>1</sup> Composition No. 8 in the complete set.

No. 6. "F" GRADE COMPOSITION. VALUE, 39.1%

### HOW TO HARNESS A HORSE <sup>1</sup>

I am going to tell you how to harness a horse. First you led him out of his stall take off his halter then put on his collar then put on his bridle put on his saddle. Then led him out to the team back him up into the shafts left them up put  
 5 them into the socets on the saddle them tient up the shaft strap then fix the traces to the whippel tree the the bretchen then the chect rains the run the rains throught the holds in the saddle back to the team.

#### *Merits*

Only two things can be said in commendation of this theme: the first sentence is free from mechanical errors, and the directions for harnessing a horse are given in logical order.

#### *Defects*

The theme has many faults. The meagerness of the writer's vocabulary, made conspicuous by the childish repetition of *then* and *put*; his utter lack of sentence sense; his inexcusable errors in spelling, such as *led* for *lead*, *the* for *then*, *left* for *lift*, *tient* for *tighten* — all these illiteracies make the theme rank low.

#### *Comparison*

This theme is inferior to No. 5 in spelling, punctuation, and sentence structure. With its bare enumeration of the steps in the process of harnessing a horse, it completely lacks the slight elements of grace which dependent clauses and fuller explanations contribute to No. 5.

<sup>1</sup> Composition No. 11 in the complete set.



## THE ARGUMENTATION SCALE

THE TABULATION OF RESULTS OF READINGS<sup>1</sup>

Table I shows the grade that each of the twenty-four readers gave each of the twenty-five compositions in argumentation.

TABLE I

No. of Reader	Number of Composition																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	52	73	48	78	78	70	88	35	90	60	82	48	58	55	80	95	58	40	90	55	85	45	48	50	78
2	66	69	60	72	77	71	88	67	65	75	83	78	57	82	87	97	93	45	92	68	79	50	40	74	86
3	50	50	40	75	75	70	85	45	60	80	70	50	50	55	65	95	65	45	95	60	55	45	40	55	90
4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	45	50	..	..	..	..	75	..	60	70	70	60	45	40	80	85	40	..	75	70	80	..	40	55	85
6	75	70	58	80	..	..	65	45	85	68	83	55	50	88	..	90	72	50	78	68	65	58	62	60	78
7	70	62	50	75	83	70	88	55	92	80	92	57	58	72	73	85	65	66	95	55	80	60	52	60	94
8	65	70	60	85	80	80	75	68	85	70	80	75	70	65	70	95	75	60	85	70	68	65	55	65	70
9	68	67	52	83	90	85	73	48	78	50	80	49	46	63	60	92	55	64	95	70	87	65	45	57	75
10	60	60	45	50	65	70	65	50	70	60	60	50	40	60	75	95	65	45	85	60	50	45	45	70	65
11	70	70	70	87	90	85	93	60	93	80	94	60	50	82	80	95	65	73	90	85	89	78	65	68	93
12	55	85	45	80	70	70	90	45	95	65	80	70	50	55	..	95	75	55	90	75	65	50	45	65	75
13	70	50	55	52	62	60	80	66	85	73	75	74	40	45	61	90	51	54	83	82	87	63	48	57	88
14	55	60	45	65	70	80	70	45	75	60	80	80	45	50	85	90	50	50	85	80	85	65	45	60	90
15	60	85	45	55	65	48	75	45	90	65	75	79	55	55	90	95	45	50	90	63	70	50	45	55	85
16	56	54	45	85	80	83	91	78	88	65	70	58	50	68	78	95	54	46	93	52	72	50	46	50	75
17	60	55	45	58	..	50	60	50	95	50	60	65	55	65	..	95	55	50	88	70	70	50	50	55	85
18	61	56	54	82	69	78	79	55	94	75	93	73	65	80	90	95	67	60	88	70	85	58	48	63	92
19	51	74	45	70	58	67	87	45	95	54	89	71	49	56	70	95	52	60	82	65	77	47	50	68	85
20	48	48	40	50	50	65	68	55	50	52	56	50	45	48	65	90	68	55	85	52	48	48	42	50	70
21	67	69	60	72	70	71	85	66	65	76	84	78	58	82	87	95	73	50	90	68	80	55	45	74	88
22	65	63	56	78	74	72	85	57	89	67	75	62	60	74	73	95	64	58	90	62	82	45	40	65	76
23	61	71	45	87	85	77	93	52	90	65	75	59	55	64	76	95	66	48	92	54	78	53	46	47	79
24	58	52	43	88	83	80	91	47	85	66	70	55	53	63	75	95	61	45	93	50	78	49	40	46	72

<sup>1</sup> Mr. William J. Sands did the statistical work on the Argumentation Scale.

<sup>2</sup> Reader No. 4 did not read this set of compositions.

<sup>3</sup> Blank spaces indicate that the reader did not grade that composition because the composition was not considered suitable for a scale.

Table IV shows the ranking of each composition in argumentation by each reader.

TABLE IV

No. of Reader	Choice in Rank																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	16	9	19	7	21	11	15	25	5	4	2	6	10	13	17	20	14	1	24	23	12	3	22	18	8
2	16	19	7	15	25	11	14	21	12	5	10	24	17	4	6	2	20	8	1	9	3	13	22	18	23
3 <sup>1</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4 <sup>1</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	16	25	21	15	19	7	11	10	20	9	12	24	2	1	13	17	14	23	18	8	6	5	3	22	4
6	16	14	9	11	4	25	19	1	17	2	10	20	7	21	23	24	3	22	12	13	18	8	5	6	15
7	19	25	11	9	7	16	5	10	21	4	15	14	6	1	24	18	17	2	22	13	12	8	20	23	3
8	16	19	9	4	11	6	7	12	17	20	10	25	5	15	13	2	21	8	24	22	1	14	18	3	23
9	19	16	5	21	6	4	11	9	25	7	20	1	2	22	18	14	15	24	17	3	10	12	8	13	23
10	16	19	15	24	9	6	25	17	7	5	20	14	11	10	1	2	21	12	8	4	13	22	18	3	13
11	16	11	7	9	25	5	19	21	4	6	20	14	10	25	22	18	1	2	3	24	17	23	8	12	13
12	9	16	7	19	2	11	4	20	17	25	12	5	6	10	24	21	18	14	1	13	22	8	3	23	15
13	16	25	21	9	19	20	7	11	12	10	1	6	8	22	5	15	24	3	18	4	17	2	23	14	13
14	16	25	21	15	19	20	11	12	6	9	5	7	4	22	2	10	24	1	14	17	18	3	8	13	23
15	16	9	15	19	2	25	12	7	11	21	5	10	20	1	14	24	4	13	18	22	6	8	17	23	3
16	16	19	7	9	4	6	5	15	25	21	11	14	10	17	12	1	2	20	13	24	22	8	18	23	3
17 <sup>1</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
18	16	9	11	25	5	19	21	4	14	7	6	10	12	20	5	17	13	24	1	18	22	2	8	3	23
19	16	9	11	7	25	19	21	2	12	4	15	24	6	20	18	5	14	10	17	1	23	13	8	22	3
20	16	19	25	7	17	6	15	11	8	18	20	10	4	5	9	12	24	14	21	22	1	2	15	23	3
21	16	19	25	15	7	11	14	21	12	10	24	17	4	6	5	2	20	1	8	9	3	13	22	18	23
22	16	19	9	7	21	4	25	11	5	14	15	6	10	24	1	17	2	12	20	13	18	8	3	22	23
23	16	7	19	9	4	5	25	21	6	15	11	2	17	10	14	1	12	13	20	22	8	18	24	23	3
24	16	19	7	4	9	5	6	21	15	25	11	10	14	17	1	12	13	2	20	22	8	24	18	3	23

<sup>1</sup> Reader No. 4 did not read these compositions. Readers No. 3 and 17 gave several compositions the same grade, hence the compositions could not be ranked.

## THE COMPLETED ARGUMENTATION SCALE

No. 1. "A" GRADE COMPOSITION. VALUE, 93.2%

IS A YEAR OF TRAVEL MORE ADVANTAGEOUS THAN A  
YEAR OF STUDY ? <sup>1</sup>

Yes. In nearly all lines of study, travel is an important aid.

Geography for instance. Places dryly discussed in class and soon forgotten become actual. Races that made no impression in print are fastened in the mind by a hundred vivid pictures. Products that seemed so useless and annoying to learn are full of importance and interest when seen being loaded on ships or mules. Queer oriental customs, laughed at when studied become natural, comprehended facts. Statistics are seldom learned while travelling, but when they are, they are remembered because the bare, dry fact is connected with an actual thing — not merely figures, groaned over because they were difficult to learn.

History also. Some spot where General A's army manoeuvred in this direction, and Colonel B's in that, becomes real ground, to be revered and remembered. The hills that would get on the wrong side of the diagram are here in their true position, and that granite monument marks the spot where the brave commanders died.

Languages, too. An impossible French name slides off glibly when often heard. Some word is gained with very little effort, another, and the door to the whole language is thrown wide. The same is true of Italian, and the best part of it is that the pronunciation is correct.

Mathematics could not be so easily acquired, it is true, as in the schoolroom. But when the mind has been broadened by the year of travel, the student would more easily learn this branch.

<sup>1</sup> Composition No. 16 in the complete set.

As for English, a year like this would be the greatest advantage possible. The lovely landscapes of Switzerland or Italy, the odd manners of the Orientals, the thousand types of humanity — everything lends its aid.

On the whole, travel is a thousand times an improvement over the school, because it creates interest, stimulates thought, and broadens the traveller as nothing else can.

### *Merits*

This theme is excellent because the writer has his argument clearly in mind, follows a carefully planned outline, and expresses himself convincingly. The question is stated clearly, and the conclusion leaves a definite impression on the reader's mind. The illustrations used are well chosen and vivid, especially the ones about foreign customs and historical scenes. Vocabulary and sentence form are good.

### *Defects*

A different arrangement of arguments in the order of climax would add strength to the theme. The beginning of each paragraph is awkward because of the use of detached phrases and words: i.e. *yes*; *geography for instance*, *languages too*. Either these phrases should be deliberately isolated as headings, and the whole paper thrown into outline form, or else they should be expanded into complete statements. There is some weakness in punctuation, as for example, a semicolon should be substituted for the comma after *effort* in line 22.

### *Comparison*

This theme is better than No. 2 because it follows a more definite plan, its arguments are more clearly stated, and its vocabulary is more varied.

## No. 2. "B" GRADE COMPOSITION. VALUE, 81.5%

WHY COUNTRY LIFE IS BETTER THAN CITY LIFE<sup>1</sup>

Country life is the best kind of life there is to be lived.

The country is good for children and grown up people alike. The children have plenty of fresh air and room to run about in. To be sure they do not have the large schools of the city; but they have the great school of Nature and that is greater than any learning they could get in city schools. The parents are not afraid to let them run about because there are no automobiles, electric cars, etc., to run over them. There is safety in the country. 5

The country is the best place sick people could go. The air is pure and bracing and there is water cool and fresh from the spring or well. For the tired man working in a busy city office a rest in the country is the best thing for him and the sooner he gets it the better it is for him. 10

The country people have good times even if they don't go to fancy balls, theatres, etc., and stay up until one or two o'clock in the morning. They have a good healthy time and are home and in bed by nine or half-past. 15

For these reasons, and many others, the country is the best place for children or adults, sick or well. 20

*Merits*

The writer has a sense of arrangement, shown (1) by his introduction; (2) by his paragraphs that develop successively the advantages of country life; and (3) by his conclusion. The composition is also correct in its elementary mechanics — spelling, punctuation, grammar, and paragraph and sentence structure. The vocabulary, while not distinctive, is adequate.

*Defects*

The arguments are not wholly convincing. For example, *the great school of Nature* is, for most children, not a satisfactory substitute for a city school. Then, to say without qualification, that the country is the best place for

<sup>1</sup> Composition No. 25 in the complete set.

sick people to go, is misleading. The repeated use of *etc.* is ineffective. The summary should not contain the phrase *and many others*.

### *Comparison*

This composition lacks the virility of thought and diction that marks No. 1. It is, however, superior to No. 3 in arrangement, in sentence structure, and in its firmness of mental grasp.

No. 3. "C" GRADE COMPOSITION. VALUE, 71.9%

THE GOOD OF A LANTERN IN GEOGRAPHY <sup>1</sup>

A lantern is a good thing in a school as it shows the different cities, countries, and also the ways of the people. This gets the children acquainted with foreign places. Also the reciting about the pictures gives them an interest which would not be so great as if they were in the schoolroom.

5

It is a good thing for the children to get up before the class and recite, that gives them self confidence and also prepares them more for high school. In having the lantern it interests the children so they look for pictures to use, and they find and read many interesting things.

10

When the pictures are passed out they look up many things at home and find out new things and so as other children find things out they help the class.

*Merits*

The merits of this composition are three: (1) the form is purely argumentative throughout; (2) the pupil had a few distinct advantages of the use of a lantern in mind; and (3) troublesome words like *acquaintance* and *foreign* are correctly spelled.

*Defects*

The defects are as follows: (1) poor arrangement of facts makes this theme ineffective; (2) the sentences are awkward — for example, the third and fifth; (3) the fourth sentence illustrates the "run-on" sentence or "comma error"; (4) there is lack of clearness in the antecedents of pronouns — *they* in lines 5, 11, and 13; (5) there is a poverty of vocabulary — the word *thing* or *things* occurs six times, and *children* occurs in almost every sentence.

*Comparison*

This theme follows No. 2 in the scale because it has less mature thought, inferior sentence structure, and a more limited and childish vocabulary. It precedes No. 4 because, although not so effectively written, it adheres more closely to the form of writing required — argumentation.

<sup>1</sup> Composition No. 6 in the complete set.

## No. 4. "D" GRADE COMPOSITION. VALUE, 63.6%

FOOTBALL IS A BETTER GAME THAN BASEBALL<sup>1</sup>

Football is a better game than baseball. It's not only (only) muscle and strength that makes a football player. He must have the power to think quick. When the team is a short distance from the goal and scores, somebody's quick  
5 thinking has done it.

Baseball is an exciting game in parts. But football is exciting from the (the) time the ball is kicked till the referee blows his whistle. Football shows when a man or boy has grit. I once attended a game. The score was tie and the  
10 opposing team were only a few yards from the goal and three minutes to play. The quarterback gave his signal and they struck the line. The struggling mass moved a few feet and stopped with a jump. Out of the mass a man jumped. His face was all battered, but he struggled on till he had got the  
15 ball over the line. Some people call it brutal. Some cases it is and some it is not. I would rather strike the line in football clothes for a few yards gain, than stand up at a plate and have a man hurl baseballs at me. Which would you rather do?

*Merits*

The writer of this theme evidently has a plan of procedure in mind. After clearly stating his proposition in the first sentence, he seeks to establish three good points of superiority for the game of football. Though unable to prove these points, he has succeeded in leaving with the reader a firm conviction of his belief that football is a good sport. Lines 9-15 give effectively the writer's impressions of a critical moment in a game.

*Defects*

The author fails to prove his proposition, because he mistakes for arguments a few loosely stated facts and preferences. His plan of reasoning, though suggested, is entirely undeveloped. Mechanical errors are numerous: (1) two mistakes in the use of parentheses (lines 2 and 7); (2) plural verb with singular subject (line 10); (3) adjective modifies a verb (line 3);

<sup>1</sup> Composition No. 2 in the complete set.



and the pronoun *it* is used vaguely in line 15. The paragraphs are without system, and the sentences in general are short and disconnected.

### *Comparison*

This composition deserves its place in the scale above No. 5 because of its superior mechanical accuracy and larger vocabulary. It does not hold as closely to its subject as does No. 3.

No. 5. "E" GRADE COMPOSITION. VALUE, 52.3%

WHY EVERY GIRL SHOULD LEARN TO COOK<sup>1</sup>

Every girl should learn to cook. If she was out of employment it would be very useful.

Later on, if she should keep house she would want to be able to cook. If she didn't know how, the lady would have to hire a cook. Sometime, perhaps, she could not pay to keep a cook. Then she would say, "Oh, how I wished I learned to cook when I was younger, instead of buying bakers things."

If this womans children wanted to learn to cook who would they ask to learn them. Their mother couldn't, because she did n't know how her self. So you may see for yourself it is very important that every girl should learn to cook.

*Merits*

This theme shows that the author had a plan; for it gives several sound reasons why every girl should learn to cook — reasons arranged in a fairly logical order. The punctuation of certain sentences is unexpectedly good.

*Defects*

The theme is, however, faulty in unity and coherence. There is a shifting of tense, a lack of definite antecedents for such words as *it* (line 2), and *lady* (line 4). The arguments are not sufficiently expanded to make them clear. The theme is further marred by such mechanical errors as: misspelling of *employment* (line 1); a complete absence of the apostrophe and interrogation point; the incorrect use of *who* (line 9), and *learn* (line 10).

*Comparison*

This theme is placed lower in the scale than No. 4; it has less force as an argument, and has more mechanical errors.

<sup>1</sup> Composition No. 13 in the complete set.

No. 6. "F" GRADE COMPOSITION. VALUE, 47.0%

THE WINTER IS THE BEST SEASON<sup>1</sup>

The winter is the best season in the year because they are skating and pung-riding coasting etc. In the spring when you plant the crops you are kept busy. In the summer taking care of them weeding in them and picking bean peas. and the only day you get of is Sunday.

5

In July it is too hot you swet all the time the horse won't run because it is so hot. In the fall you are busy get in all the crops and cutting corn banking celery, digging potatoes, pulling turnips, picking apples, pears, cutting onions and every thing else. So the winter is the only time you can have fun when they are nothing to do.

10

*Merits*

There is little to defend in this theme. Only one line of argument is attempted; that one, however, is arranged logically according to the order of the four seasons. The use of specific words is good, and the large number of illustrations drawn from the pupil's own experience arouses sympathy in the reader.

*Defects*

Although the range of arguments is limited, and those arguments consist mainly of the enumeration of the woes that beset a boy in the other seasons rather than in the joys of winter, it is from the mechanical standpoint that this theme is a failure. There is manifested an entire lack of sentence-sense since examples of both "run-on" sentences and unfinished clauses occur frequently. Errors in spelling, punctuation, and grammar are found in every line. The whole composition is the expression of a backward, limited mind.

*Comparison*

The theme deserves a lower place in the scale than No. 5 because of the greater frequency of mechanical errors. In weight of subject matter, however, it is superior.

<sup>1</sup> Composition No 23 in the complete set.

## THE NARRATION SCALE

THE TABULATION OF RESULTS OF READINGS <sup>1</sup>

Table I shows the grade that each of the twenty-four readers gave each of the twenty-five compositions in narration.

TABLE I

No. of Reader	Number of the Composition																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
1	73	45	95	68	68	58	90	58	55	70	60	80	73	68	75	55	50	78	85	60	75	75	65	73	80
2	90	58	95	71	61	55	56	58	59	60	76	87	69	68	73	62	72	75	82	64	86	80	65	70	85
3	93	45	95	58	58	65	93	45	60	60	77	90	50	55	65	68	80	83	73	48	75	90	68	88	85
4 <sup>2</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	75	50	95	78	73	55	70	50	48	70	73	85	88	68	75	85	70	65	90	60	90	85	80	80	93
6	79	46	93	66	83	64	75	60	78	52	58	95	78	82	80	85	73	70	75	67	60	88	75	77	91
7	78	48	95	65	75	55	92	67	67	60	62	87	70	68	71	60	64	82	91	58	88	72	66	68	90
8	70	50	80	65	68	50	75	..	68	60	50	65	70	60	50	50	50	65	65	60	68	65	60	50	70
9	70	45	95	75	55	53	85	73	72	72	73	90	83	57	48	63	78	80	87	50	73	68	65	60	93
10	75	45	95	73	65	55	85	70	68	63	70	90	80	58	45	67	70	80	80	48	70	68	73	58	90
11	78	40	90	65	87	63	95	70	75	60	73	84	73	75	55	55	73	80	83	60	86	76	70	78	85
12	90	45	95	83	67	48	70	57	53	55	80	93	92	63	75	65	72	85	75	50	75	70	78	60	88
13	82	65	94	81	79	78	93	80	77	88	89	87	91	76	90	60	74	75	92	70	86	83	84	85	95
14	88	45	95	70	85	65	90	55	50	65	75	90	85	70	90	75	78	80	95	75	85	80	85	78	95
15	70	45	95	50	64	54	91	65	75	58	62	83	68	60	75	50	68	78	85	49	85	68	59	55	88
16	78	45	92	56	65	50	90	62	58	60	60	88	72	66	68	57	62	80	85	52	87	75	68	70	95
17	92	45	93	48	83	50	70	55	60	68	80	83	75	78	80	50	58	94	93	68	85	88	58	85	85
18	88	45	95	68	71	55	88	60	70	62	76	92	83	73	75	53	65	90	86	58	78	85	53	80	84
19	88	45	95	67	80	55	83	61	76	60	77	91	87	78	77	60	65	90	86	59	81	84	71	79	85
20	95	40	90	58	55	50	62	60	50	58	65	80	72	50	45	55	55	58	70	48	55	58	75	85	55
21	85	45	95	65	68	60	92	55	48	51	75	90	73	64	69	53	66	80	81	71	87	78	62	70	83
22	81	48	95	67	73	55	92	72	66	50	75	87	70	62	70	66	64	74	78	53	80	75	68	82	85
23	76	50	95	65	64	57	92	61	59	74	58	82	79	66	68	63	60	84	83	62	80	71	69	75	87
24	77	45	95	64	62	60	93	66	59	67	69	83	80	63	68	56	75	85	89	61	87	72	70	65	91

<sup>1</sup> Mr. Maurice J. Lacey did the statistical work on the Narration Scale.

<sup>2</sup> Reader No. 4 did not read this set of themes.

Table IV shows the ranking of each composition in narration by each reader.

TABLE IV

No. of Reader	Choice in Rank																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23 <sup>1</sup>	24	25
1	3	7	19	25	12	18	15	21	22	1	13	24	10	4	5	14	23	11	20	6	8	9	16	17	2
2	3	1	12	21	25	19	22	11	18	15	17	4	24	13	14	23	20	16	5	10	9	2	8	7	6
3	3	1	7	12	22	24	25	18	17	11	21	19	16	23	15	6	10	9	5	4	14	13	20	2	8
4 <sup>1</sup>	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5	3	25	19	21	13	16	22	12	23	24	4	1	15	5	11	7	10	17	14	18	20	6	2	8	9
6	12	3	25	22	16	5	14	15	1	9	13	24	23	19	7	17	18	20	4	6	21	8	11	10	2
7	3	7	19	25	21	12	18	1	5	22	15	13	14	24	8	9	23	4	17	11	10	16	20	6	2
8	3	7	25	13	1	9	21	5	4	19	18	22	12	14	10	20	23	17	24	11	6	16	2	15	..
9	3	25	12	19	7	13	18	17	4	21	8	11	9	10	1	22	23	16	24	14	5	6	20	15	2
10	3	25	12	7	19	18	13	1	23	4	21	17	11	8	9	22	16	5	10	24	14	6	20	15	2
11	7	3	5	21	25	12	19	18	1	24	22	9	14	11	13	17	8	23	4	6	10	20	15	16	2
12	3	12	13	1	25	18	4	11	23	15	21	19	17	22	7	5	16	14	24	8	10	9	20	6	2
13	25	3	7	19	13	15	11	10	12	21	24	23	22	1	4	8	5	6	9	14	18	17	20	2	16
14	3	19	25	7	12	15	1	5	13	21	23	18	22	24	17	20	16	11	14	4	6	10	8	9	2
15	3	7	25	21	19	12	18	15	9	1	13	17	22	8	5	11	14	23	10	24	6	4	16	20	2
16	25	3	7	12	21	19	18	1	22	13	24	15	23	14	5	17	8	10	11	9	16	4	20	6	2
17	3	18	19	1	22	21	24	25	5	12	11	15	14	13	7	10	20	9	23	17	8	6	16	4	2
18	3	12	18	7	1	19	22	25	13	24	21	11	15	14	5	9	4	17	10	8	20	6	23	16	2
19	3	12	18	1	13	19	25	22	7	21	5	24	14	15	9	11	23	4	17	8	16	10	20	6	2
20	1	3	24	12	23	13	19	11	7	8	4	10	18	22	25	21	17	16	5	14	9	6	20	15	2
21	3	7	12	21	1	25	19	18	22	11	13	20	24	15	5	17	4	14	23	6	8	16	10	9	2
22	3	7	12	25	24	1	21	19	11	22	18	5	8	13	15	23	4	9	16	17	14	6	20	10	2
23	3	7	25	18	19	12	21	13	1	24	10	22	23	15	14	4	5	16	20	8	17	9	11	6	2
24	3	7	25	19	21	18	12	13	1	17	22	23	1	15	10	8	24	4	14	5	20	6	9	16	2

<sup>1</sup> Reader No. 4 did not read this set of compositions.

## THE COMPLETED NARRATION SCALE

No. 1. "A" GRADE COMPOSITION. VALUE, 93.5%

MY FIRST RIDING LESSON<sup>1</sup>

I gazed down into the riding ring from the balcony where I was sitting. The riding master was cantering around the ring with a young girl who seemed to be an experienced rider. Riding looked easy.

5 After another round he rode up to the doors which a man outside flung open, and rode out. A few minutes later he called up the stairs, "I am ready for you, Miss Speare," and taking my crop I rushed eagerly down the stairs, for this was my first riding lesson.

10 I scrambled on to the back of a small horse that stood patiently quiet, waiting.

"Are your stirrups all right?" the riding master asked, when I was on.

"Yes," I replied, "They are just the right length."

15 "That's good," and he leaped into the saddle and we rode into the ring.

"You have not ridden before, have you?" he asked as we walked slowly around the ring.

20 "No," I replied, "I have n't." "But I was thinking to myself how easy riding is!"

"We will trot now," he said, after a little and the horses began to trot slowly.

Then I discovered my mistake. Riding is not especially easy for beginners. And trotting is not as easy as walking.

25 "Rise with the horse," he commanded. "Cling on with your knees and rise in your stirrups."

Easier said than done. I bounced up and down until I thought I should fall off. It looked so easy when other people trotted! He seemed to do it so easily, why couldn't  
30 I? Yet I could n't and that was plain.

<sup>1</sup> Composition No. 3 in the complete set.

"I c-can't s-seem to r-rise with h-him. H-he b-bounces m-me awful," I gasped finally. He pulled in and we walked for a while.

"Now try to rise in your stirrups," he said as we began to trot again.

I got along better this time although I still bumped terribly.

Then he discovered that the hour was up and we rode out. He dismounted and helped me off and when I reached the ground I felt very unsteady.

I staggered up the stairs, for I was very wobbly, seized my crop and hurried down. If riding was like this all the time! He was talking to mother.

"All right," I heard him say, "A week from to-day; same time. She did pretty well for the first time. Too bad she is so stiff."

I didn't feel like another lesson at any time but I didn't say so and with mother I left the riding school and my first riding lesson was at an end.

### *Merits*

The situation is vividly portrayed, with plenty of conversation. From the lively introduction to the direct conclusion, the interest is kept up by well-selected details. The paragraphing is good, and the mastery of quotation marks is evident. Good choice of words is shown in such natural phrasing as *rushed*, *gazed*, *flung*, *scramble*, *bounced*, *staggered*. The connection between the paragraphs is unusually good.

### *Defects*

The defects are in matters of form. There is unnecessary repetition of the word *ride*. Punctuation is omitted in several places. There are mistakes in spelling (lines 10, 24, 27). In *that's good*, the apostrophe is omitted. The concluding sentence is loosely constructed.

### *Comparison*

This theme holds a higher place than No. 2 because of its excellent choice of details and its vivid expression. It is a more ambitious piece of work, and the interest is more surely sustained.

No. 2. "B" GRADE COMPOSITION. VALUE, 83.0 %

MY TRIP TO FAIRYLAND <sup>1</sup>

It was about four o'clock in the afternoon, and as I was very tired I sat down by the fire to rest. Suddenly I heard a small voice calling me by name. I immediately looked up and beside me I saw what I thought was a fairy. I was very  
5 much excited as I had never seen a fairy but had only read of them.

"Would you like to come with me to Fairyland and rid yourself of your cares for a while?" she questioned.

"I would love to," I answered.

10 "Then only follow me," she said.

So out of the room we went and down the cellar stairs.

"Where are you leading me?" I asked.

"You shall soon find out," she answered.

We went into the darkest corner of the cellar. She showed  
15 me a small trap door which she went through, leaving me alone.

"But how am I to get through?" I asked.

Without a reply she touched me with her small wand, and before I had a chance to say a word I found myself through  
20 the door and in a beautiful garden which was filled with fragrant flowers of many kinds. She led me through it, and at one end of it I saw a white marble palace.

"This is my home," she said. Do you care to enter?"

"That would be delightful," I said.

25 Up the stairs we went and down a long hall. Finally we came upon a large beautiful room. It was filled with dancing fairies who were having a gay time. My fairy introduced me to some of the fairies, and then joined in the merry making. I stood and looked at the splendor of it all, when suddenly I heard a voice calling me, and I looked up.  
30

It was my mother who said, "I have called you three times. You must have been asleep."

<sup>1</sup> Composition No. 19 in the complete set.



*Merits*

The spelling, punctuation, sentence structure, and especially the paragraphing of this composition, are accurate. The story, as a whole, has action; the conversation is well handled; there is a studious effort to avoid repetitions, as, *questioned, asked, answered, said* (lines 8-12).

*Defects*

The chief defect is a childish use of tiresome short sentences. The verb forms do not produce action enough. In line 23 quotation marks are omitted before *Do*, and there should be a hyphen in *merry-making* (line 28).

*Comparison*

The superior paragraph structure of this theme is sufficient to place it above No. 3. It lacks the merit seen in the easy and spirited conversation of No. 1.

## No. 3. "C" GRADE COMPOSITION. VALUE, 76.2%

LOST IN THE WOODS OF CONNECTICUT <sup>1</sup>

"Who's going blackberrying to-day?" cried my cousin Margaret waving her pail.

"I am," I said coming out of the house a pail in one hand and a wide brimmed hat in the other.

5 "Allright," answered Margaret, "but where's Julia?"

"Must be in the house," I replied.

We soon found her diligently reading a book and after some urging she decided to go.

10 It was about eight o'clock when we started for if we waited till later on in the day it would be too hot.

We walked a long way to the other end of the farm after climbing stonewalls and having several encounters with snakes.

15 "How much farther do we have to go?" I cried growing impatient.

"The other side of this field," Margaret called back.

After climbing the stonewall we came in sight of big stretches of blackberries.

We fell to work right away and picked very fast.

20 In a little while we stopped and found we had worked a good way. As we went on the berries seemed to grow bigger and sweeter.

25 After filling my pail I found Margaret was through long before me and was sitting in the midst eating. We waited till Julia was through and then started for home. We were so busy talking Margaret did not notice which path we took and after walking a long way she discovered our mistake. I wanted to turn back and go the way we came but she said it would take too long so we struck out into the woods. The  
30 farther we went the more perplexed we were till finally Margaret sat down under a tree in despair.

<sup>1</sup> Composition No. 22 in the complete set.

This would never do so I decided to climb a nearby tree to see if we could see any signs of a house.

With much pulling and tugging I got up the tree and saw a house to the right. We reached the house tired and hungry. 35

We were lucky to come to come to such a place for the mistress proved to be very good. After resting one of the hired men drove us home just in time to see a searching party going out to look for us as it was now late in the afternoon.

### *Merits*

The most commendable feature of this narrative is the management of the conversation. This is accurately punctuated and contains a variety in the verbs of *saying*. Placed at the beginning, it gives an element of spontaneity and arouses the immediate interest of the reader. There are several well-chosen expressions — such as *several encounters with snakes*, *pulling and tugging*, and *in despair*. The arrangement of ideas is logical.

### *Defects*

Except for the incompatibility between the content and the title, the defects are mechanical; (1) poor paragraphing except in the conversation; (2) the unskillful use of the compound sentence in the sentences beginning on lines 7, 9, 25; (3) the unemphatic position of the participial phrase in lines 12 and 13, and of the dependent clause in the last sentence; (4) the absence of commas after introductory clauses and phrases, in some instances causing an ambiguity of meaning as in sentences commencing in lines 21 and 37; (5) the grammatical error in the incoherent reference of the pronoun *their* in line 24; (6) the evident carelessness in the spelling of *the*, *all right* and *too* and in the repetition of *to come* in line 36; and (7) the poor choice of words in the colloquial *nearby* and in the repeated use of *long ways*.

### *Comparison*

This theme is superior to No. 4 in its maturity of thought and phrasing; it is inferior to No. 2 in mechanical form.

No. 4. "D" GRADE COMPOSITION. VALUE, 66.4%

A HAPPY BUT EXCITING AFTERNOON <sup>1</sup>

Allen had just gotten a new motor-boat for his birthday and wanted to try it out as it was Saturday. "Well," he said, "will you come with me Emily. You can bring Edna if you wish."

5 "All right," said Emily, and off she went to get Edna, her cousin.

They started out at Marblehead and was going to go as far out in the harbor as they could.

10 All went well for about one hour, then it was getting rough. The girls got frightened, but, they had more to be frightened about later, the propellor broke off. All there was to do was to go where ever the waves would take them.

They were heading for open sea. "Oh," said Edna, "how perfectly horrible."

15 "I'm not coming out in this motor-boat again," said Emily.

"I guess you won't, Emily, but look, here comes a ferry-boat."

20 So it was, "now for the fun," said Allen, who was not the least bit excited, "I'm going to call their attention."

The ship came nearer and nearer to them. Soon it was within reach and Allen made a grab for it. He got hold of the side and helped the girls in. Then he got a rope and tide it to the motor-boat.

25 "Well," said the girls to-gether, "we will never go in a motor-boat with you again."

*Merits*

The merits are two: (1) the child had a fairly well planned story in mind; (2) he has an accurate knowledge of the use of quotation marks.

<sup>1</sup> Composition No. 14 in the complete set.

*Defects*

The defects are as follows: (1) the paragraphing is poor; (2) there are several examples of the "run-on" sentence (lines 9, 11, and 20); (3) the words *propeller*, *wherever*, *together*, and *tied* are misspelled; (4) *can* is used in line 3 instead of *may*; (5) in line 7 there is a singular verb used with a plural subject; (6) there are errors in punctuation (lines 3, 10, 14, and 19); (7) the vocabulary is childish.

*Comparison*

This theme follows No. 3 in the scale because of the inferior development of its plot and the greater immaturity of its expression.

## No. 5. "E" GRADE COMPOSITION. VALUE, 56.0%

A GHOST STORY<sup>1</sup>

"Come Joe, run faster we must get Harry to come with us and we have but few minutes to do it in if we want to get there before dark," said John as he leaped a fence and started toward a house in the distance.

5 Joe jumped the fence and ran after John as fast as he could in order to catch up with him so they could go in together.

They reached the house all out of breath.

"Hullo boys! where are you going, can I be one company?" were the series of questions poured forth to John and  
10 Joe as they entered the house.

John and Joe told them where they were going, and Harry readily consented to go.

They reached the house and ate their supper and went to bed.

15 They were not asleep long when Joe woke up and hollered for John and Harry to come to him because he saw a ghost.

Harry jumped up and entered the room in which Joe was sleeping.

"Where is the ghost," he asked, "I don't see any."

20 He is gone now, said Joe. In the morning they thought they would investigate.

They found it was only a white post and a white sheet behind it. They then started home and told their parents about their adventures.

*Merits*

The writer has a strong and dramatic opening, and throughout the theme handles his dialogue well. His sense of order is good and his vocabulary adequate. Such expressions as *the series of questions poured forth* and *readily consented* are good.

*Defects*

The good promise of the beginning is not fulfilled; the climax is not worked up successfully and the whole trails off into a pointless incident. The

<sup>1</sup> Composition No. 6 in the complete set.

mechanical errors are numerous; almost every sentence is made a separate paragraph; there are two examples of the "run-on" sentence (lines 1 and 19); there are several comma omissions and one use of a comma where there should be a question mark (line 19); there is an error in tense sequence (line 15); the words *of the* are omitted in line 8; *readily* is misspelled (line 12).

### *Comparison*

While more dramatic than No. 4, the theme is properly placed lower on account of the large number of mechanical errors and the drooping narrative interest.

No. 6. "F" GRADE COMPOSITION. VALUE, 46.9%

LIFE IN A CABIN<sup>1</sup>

In a woods our cabin is which is made of logs. In side are two rooms furnished with rough hand made furniture. On the wall of the den hung skins and many pictures.

We had to have something to eat so we had to find a river  
5 where we could fish. We got enough fish and soon they were over the fire frying.

Next day an Indian came with some meat. We gave him a few coppers had he was real pleased.

"Jingle jingle," was the noise out side as the horse gal-  
10 loped. It was cousen Joe.

"Hurrah! now for some fun," I cried. "Come toboggan-  
ing? See that that hill over there well its great toboggan-  
ing."

"Come in," said Joe, "till I get my moccasins?"

15 What fun we had many tumbles we got. Just as we were going home we saw a deer laying in the snow. We crept up to him but he did not move. Than we put him on the toboggan and took him home. He was cold but we gave him some warm milk and he tryed to get up, But he could not.

20 "Poor thing he must be hurt," said Joe. "His leg is broke don't you see." Then we bathed his leg and bound it. Soon he was able to stand on his legs and became a house pet.

"Oh, dear its snowing," said Joe, "Lets not go out as my  
25 snoweshoes are not here."

*Merits*

The merits of this theme are: (1) an attempt to make an introductory paragraph; (2) the introduction of conversation; (3) the use of interrogative and exclamatory sentences; (4) the simple and natural language; (5) the orderly sequence of points in the story.

<sup>1</sup> Composition No. 2 in the complete set.



*Defects*

Though well begun, after the first paragraph this theme is simply a series of disconnected events and apparently unrelated statements. (1) Punctuation is faulty; (2) sentences are badly constructed; (3) the meaning in several places is not clear; (4) there are many mechanical errors, such as *than* for *then*; *broke* for *broken*; *laying* for *lying*; *had* for *and*; (5) the apostrophe is omitted in contractions; and (6) the tense changes abruptly in the opening paragraph.

*Comparison*

This theme is inferior to No. 5 in sentence structure, in connected arrangement of material, and in mechanical accuracy.











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